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LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;

NOW IN COURSE OF DELIVERY AT THE THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.

BY

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&c., &c.

Case exemplifying the effects of injury of the anterior column of the spinal marrow. CENTRIPETAL EPILEPSY.—*Its causes, symptoms, and treatment.* PUERPERAL CONVULSIONS. —*Remarks by Dr. Denman. Tetanus; centric and eccentric forms of the disease; principles of treatment. Hydrophobia. Hysteria; its differences from epilepsy. Chorea; physiology and treatment of the disease. Stammering. Anonymous critics.*

1023. GENTLEMEN:—I must proceed, in this lecture, to treat of those diseases of the true spinal system, which have their *origin*, not in the spinal centre itself, but at the origins (extremities they are erroneously termed) of the incident excitor nerves, through which they act, and successively affect the spinal centre and the reflex motor nerves.

1024. Before I do this, however, I have an interesting subject to bring before you, which relates to the spinal centre itself. According to the views of Sir Charles Bell, an affection of the *posterior* column of the spinal marrow would interfere with the function of *sensation*, whilst that of the *anterior* column would exert its influence upon the *movements*. I must recal to your minds the observations made in a preceding lecture (§ 9—12) upon this subject. I now present you with one of the most interesting cases illustrative of the effect of *irritation* upon the *anterior* column of the spinal marrow in the human subject, it is possible to imagine. I am indebted for it to Mr. Brayne, of Banbury. First let me draw your attention to the subjoined sketch. Observe the exostosis at the posterior part of the body of one of the vertebræ. This

angular body constantly irritated the adjacent or anterior column of the spinal marrow; the effect I will detail to you in Mr. Brayne's own words:—

1025. "The patient, a brazier by trade, and about forty-five years of age, had spinal angular curvature, extending through several of the dorsal vertebræ. The peculiar feature of the irritation of the chord, in addition to the usual symptoms of more or less paralysis of the sentient nerves, was great and incessant spasms and contractions of the muscles, chiefly of the flexors of the lower extremities, and also of those contracting the passage of the alvine and urinary secretions. Sometimes the urine would be forcibly ejected, and at another time the introduction of the catheter was exceedingly difficult. The irritation of the motor tract was so severe in its effects on the muscles of the thighs, that the heels were pressed so strongly against the buttocks as, at one time, to create ulceration. After death, a *rough* nodule of bone, like an exostosis, was found to project from the body of one of the vertebræ, about the middle of the curvature to the extent of half an inch into the canal of the spine, and, no doubt, was the

cause of the severe marks of inflammation and disorganisation which the chord and its coverings at that point presented, and occasioned the symptoms in question."

1026. I now proceed to treat of those diseases of the true spinal system which originate at a distance from the spinal centres; and

I.—Of Centripetal Epilepsy.

1027. This form of epilepsy takes its origin in the *excitor nerves* of the true spinal system, involving the axis of this system, and its motor nerves, in their turn; functionally, however, not organically. It is for this reason that I have denominated this form of epilepsy, *centripetal*.

1028. This form of epilepsy is to be viewed as *curable*, however *difficult* of cure. By avoiding the exciting causes, its attacks are avoided, the susceptibility to returns subsides; these returns become less frequent, and less severe, and, at length, frequently cease altogether. Everything depends upon rigid rules proposed by the physician, and strictly and perseveringly observed by the patient.

1029. In describing the *causes*, *symptoms*, and *treatment*, of eccentric epilepsy, I must recal to your minds all that I have said respecting the anatomy and physiology of the true spinal system. *Every* part of this system is distinctly but exclusively involved in the circumstances of this disease; if the encephalon suffer, it is only as an *effect* of the convulsive attacks.

1030. The principal causes of eccentric epilepsy, are, 1, the presence of indigestible food in the *stomach;* 2, the presence of morbid matters in the *intestines;* 3, *uterine* irritation. The first of these acts through the medium of the pneumogastric; the second and third through that of peculiar spinal nerves,—all *excitors* belonging to the true spinal system. Compare what I have already stated on this subject.

1031. I have so repeatedly known a patient, subject to this form of epilepsy, experience an attack within five minutes of eating some indigestible article of food, or on experiencing a deranged condition of the bowels, or on every return of the catamenial period, as to leave no doubt upon my mind upon these important points. I have known the attacks prevented by a steady and cautious attention to rules in reference to these circumstances.

1032. In detailing the *symptoms* of epilepsy, I shall have to repeat all that I have said respecting the physiology of the true spinal system; every part, every function, which belongs to that system, is involved in the pathology of epilepsy; the functions of ingestion and of egestion are precisely those affected in this disease; the *causes* act through the *excitor* nerves, the *symptoms* are manifested through the *motor* nerves (p. 15, 16) of that system.

1033. The first thing observed is a varied *distortion of the eyeball*, which is drawn from the axis of vision generally upwards, and outwards, or inwards, and of the features. The second symptom is a forcible closure of the *larynx* and *expiratory efforts*, which suffuse the countenance and, probably, congest the brain with venous blood. In all these circumstances there is a most marked and important difference between epilepsy and hysteria, on which I shall insist hereafter.

1034. In the third place, we observe that the tongue is thrust out of the mouth by the genio-glossal muscle, whilst the teeth close upon it by the action of the masseters, and it, or the upper lip, is frequently severely bitten; or, without the spasmodic protrusion, and consequent injury of the tongue, there is grinding of the teeth.

1035. We next observe convulsion,—which is general, or of the whole muscular system, or hemiplegic, or confined to one side; or it occurs in the form of trismus, torticollis, in one limb, &c.

1036. During these attacks, the *expulsors* of the fæces, the urine, or the semen, sometimes act, and there is the unconscious evacuations of these secretions. There is sometimes rigidity of the penis. On this subject I must refer you particularly to what I have said in another lecture.

1037. You will see, from this brief account of the symptoms, how peculiarly an affection of the true spinal or excito-motory system, epilepsy, is. The previous arrangement of the functions of the system, in your mind, will enable you to remember and to explore the symptoms of this disease most accurately.

1038. I must now draw your attention to another set of *facts*, as *causes*, and also to another set of *symptoms*, as effects, of the paroxysm.

1039. Deep sleep, broken sleep, loss of rest, passion, vexation, exhaustion, inanition, and, especially, rising with an empty stomach, have frequently led to a paroxysm of epilepsy, and must, consequently, be carefully avoided in our rules of regimen for the cure of this disease. I have already alluded to the relation of the *συνοχεια* and epilepsy.

1040. I have known the act of washing the hands in cold water, induce an attack of epilepsy; I have known dashing cold water on the face prevent such an attack. These phenomena must be observed with accuracy.

1041. The *effects* of the epileptic paroxysm, to which I have just alluded, are the venous congestion of the brain, and the consequent effusion of serum in repeated attacks—effects carefully to be avoided by the appropriate remedies, on account of the havoc produced by them on the mental faculties and cerebral functions.

1042. Our task consists in preventing the

attacks of epilepsy, and, if this cannot be accomplished, in treating these attacks, and in obviating their effects on the *cerebral* system. We accomplish this task by cautiously avoiding the *causes*, by moderating the *paroxysms*, and by local means of subduing vascular action, and, perhaps, of depleting the vessels of the brain.

1043. The strictest rules must be laid down for the diet, for the state of the bowels, for conducting the catamenial periods. These last should be passed in bed; the feet and abdomen should be fomented; the warm-water enema, and the opiate enema, should be administered.

1044. The immediate accession of the paroxysm may sometimes be prevented by dashing cold water on the face, or by exciting the nostrils by snuff, &c. In this manner the disposition to closure of the larynx, and expiratory efforts, is exchanged for sudden acts of inspiration.

1045. In the paroxysm, the patient must be prevented from injuring himself by falls or blows. In this danger of injury we have another marked distinction between epilepsy and hysteria.

1046. The stupor, or coma, induced by the paroxysm may require the administration of bloodletting, general or topical, according to its degree and deviation, and probable effects. But tracheotomy is the remedy against the stupor, or coma, following the attack of epilepsy, if it exist in a dangerous degree, (see § 571).

1047. Besides the means to which I have alluded, other remedies have been proposed for the cure of epilepsy, in an empirical manner, without due attention to the *kind* of the disease. It is obvious that little attention can be paid to propositions and observations so vague and indefinite. These various remedies must be tried anew, after a strict diagnosis. We shall then arrive at an approximation to the truth in reference to the value of these remedies respectively.

1048. The views which I have given of eccentric epilepsy are amply confirmed by the facts, that there is no constant morbid change observable in this disease, and that many patients, after long years of its attacks, have finally and fully recovered,—facts which ought to encourage us steadily to pursue the mode of treatment.

1049. A system of exercise, regulated sleep, the shower bath, tonic remedies, &c. &c., must be added to the other plans.

1050. After this plain and practical view of the subject, I wish to draw your attention to a few other points of intense interest in reference to epilepsy.

1051. Sometimes the attack *consists* in a momentary loss of consciousness, "oblivium quoddam et delirium adeo breve, ut fere ad se redeat, priusquam ab adstantibus animadvertatur." — *Heberdeni Comment.*, cap. 33. Sometimes this oblivium *precedes* the attack of convulsion. What is the *cause* and *nature* of this momentary loss of consciousness?

1052. In one case, the patient frequently experienced a peculiar slight alteration in the *voice*, *before* the attacks, nay, many hours before the attacks. In another case the patient lost the power of singing certain high notes which he could easily accomplish before, *after* each attack. A spasmodic affection of the larynx has obviously much to do in this disease, as well as in the crowing inspiration or croup-like convulsion of infants; so much, indeed, that I doubt whether convulsion could occur without closure of this organ. Convulsion is frequently prevented for hours together by continuously watching the threatenings of it, and dashing cold water on the face. Now the action of cold water upon the trifacial nerve, affects by a reflex influence the opening of the larynx and an act of inspiration, and thus prevents the series of muscular actions which constitute convulsion, viz., closure of the larynx, forcible efforts of respiration, and general spasmodic contraction of the muscles. It is a singular idea, that *tracheotomy would effectually prevent the epileptic seizure.*

1053. Does such a spasmodic action take place in the muscles of the neck unnoticed, compress the veins which convey the blood from the brain, and induce the oblivium to which I have just alluded?

1054. There is a most important difference between epilepsy and hysteria. The former is amongst the most serious and intractable of diseases; the latter is comparatively of little consequence. What is the cause, the nature of this difference? Certainly, amongst other circumstances, that of the presence of closure of the larynx in epilepsy, and its absence in hysteria, is not the least important. It is this event in epilepsy, combined with the expiratory struggles, which fills the veins, and induces congestion of the nervous centres, with its terrific effects. It is the absence of these phenomena in hysteria, which is the cause of the little damage done to the nervous centres in this disease, even when most violent. Consciousness is obliterated in the former disease, but is only partially, if at all, impaired in the latter. What an important topic for investigation.

1055. I *must* add another remark. Compare the croup-like affection of infants,—a *laryngeal* affection, with *pertussis*,—a *bronchial* affection. The former readily passes into convulsion; the latter rarely, and then only from the same cause, viz., the violence of the expiratory efforts. Again I say, how much remains for fresh investigation. Compare the croup-like affection with asthma in adults; the former is a *laryngeal*, the latter a *bronchial asthma*; the former passes into convulsion, the latter *never*.

1056. These observations are made in order to excite attention to this subject. The space allotted to these lectures does not allow me to do more than give a mere sketch of the important inquiry in which I am engaged.

1057. Either as *cause* or *effect* of the epileptic seizure, the fæces are deficient in bile, and the urine is preternatural in quantity and appearance, being, in one case, profuse before, and turbid, with lithotic deposits, after the attacks.

1058. Before I quit the subject of epilepsy I must make one remark upon the similarity of its effects to those of *strangulation*. In *both* these cases there is suspended respiration, with convulsive efforts, congestion of the brain, insensibility, and, to complete the analogy, amongst the remote *effects* of strangulation, is convulsion itself, the tongue is protruded, the semen expelled. I must refer you, however, upon this subject, to an interesting case in the "Observations on Surgery," by the late Mr. Hey, of Leeds, ed. 4, p. 481.

1059. That the convulsions in strangulation are *excited* through the medium of the pneumogastric nerves, is rendered almost certain by comparing the effects of the privation of air in animals in which these nerves are left entire, and in others in which they are divided; the former *with*, the other *without* convulsions.

1060. That the pneumogastric nerve has much to do with these convulsions is indubitable. The difference between the effects of strangulation, and those observed in Sir A. Cooper's interesting experiments (§ 187, and "Guy's Hospital Reports," vol. i., p. 473) is, that in the former the circulation in the brain (with sensation, as I believe,) is annihilated, the centre of the excito-motory system being comparatively unaffected; whilst, in the latter, the circulation in the medulla oblongata, the centre of that system, as well as that of the cerebrum, is arrested. The function of the key-stone of the excito-motory arcs being destroyed, the phenomena, viz., the convulsions of the thorax, or limbs, observed in the other case, are absent.

1061. The effects of pinching the pneumogastric in a living animal, may be adduced in confirmation of these views. The pneumogastric is obviously an *excitor*, as well as a motor and ganglionic nerve.

1062. You will remember what I said on the subject of *secondary asphyxia*. The remedy is frequent, full inspirations, entirely to remove residuary carbonic acid in the lungs,—repeated until the danger is over. It has been observed that convulsive diseases occur in infants, especially during the sleep. In this state there is a *defective* respiration, the proportion of carbonic acid in the lungs is greater than in waking hours. May this be an exciting cause of the convulsions? If so, the remedy would be to excite respiration by gently disturbing the sleep, after the lapse of a certain time.

1063. I scarcely dare touch upon the phenomena presented by the generative system during strangulation by suspension. It is well known that those organs are excited, and that there are erection and emission of semen, in the male subject, and a uterine flow in the female. It is said that a recourse to a temporary suspension has been had by the sensualist. It is said that in this manner an unintentional suicide has been committed.

II.—Puerperal Convulsion.

1064. Nearly allied to epilepsy is puerperal convulsion.

I have no doubt that the mysterious phenomena of abortion and parturition, are phenomena of the true spinal or excito-motory system. The same remark may be made relative to the sickness and vomiting attendant on early pregnancy. To the same class of phenomena, also, belong the convulsions which occur in the *pregnant* and *parturient* states.

1065. The principal *causes* of puerperal convulsion, besides the peculiar condition of the uterus itself, are indigestible food, a loaded and morbid state of the bowels, a distended condition of the bladder, &c., and mental shock, or anxiety.

1066. This convulsion itself resembles epilepsy. It is preceded by a peculiar hissing inspiration. It is attended with great danger, the coma induced by it being deep, and the cerebrum obviously much affected.

1067. The following extracts from Dr. Denman's work on midwifery, are full of interest in reference to an exciting cause, and a mode of prevention of this species of convulsion:—

1068. "In a case published twenty-three years ago, when the os internum began to dilate, I gently assisted during every fit; but being soon convinced that this endeavour brought on continued, or increased the convulsions, I desisted, and left the work to Nature."

1069. "On every principle, of removing the cause of the convulsions, of substituting new modes of irritation, different from that which produced the convulsions, of preventing their ill effects, or of abating that exquisite irritability which renders patients subject to them, almost every measure and method has at one time or other been tried. *Harvey* recommended the irritation of the nose in a comatose patient, who was in labour, and gives an instance of its success. Many years ago I was led, by accident to try the effect of sprinkling or dashing cold water in the face; and in some cases the benefit was beyond expectation or belief; but in other cases in which I used this method with equal care and assiduity, no good whatever was derived from it.

1070. "I subjoin the following case, to explain the manner of using cold water. In a patient in convulsions, who had been bled, and for whom many other means had been fruitlessly used, I determined to try the effect of cold water. I sat down by the bedside, with a large basin before me, and a bunch of feathers. She had a writhing of the body, and other indications of pain, evidently occasioned by the action of the *uterus*, before the convulsions, and when those came on, I dashed, with some force, the cold water in her face repeatedly, and prevented the convulsion. The effect was astonishing to the by-standers, and, indeed, to myself. On the return of the indications of pain, I renewed the use of the cold water, and with equal success, and proceeded in this manner till the patient was delivered, which she was without any more convulsions, except once, when the water was neglected. The child was born living about fifteen hours from the time of my being called, and the patient recovered perfectly.

1071. "I was much mortified to find, that I had not discovered a certain and safe method of treating convulsions; further experience convinced me that this often failed. It is, however, a safe remedy, and though it may not always have sufficient efficacy to prevent or check convulsions, whoever tries this manner of using cold water will soon be convinced that it is a most powerful stimulant."

1072. *The* remedy is the most efficient bloodletting, and the removal of the causes. Dr. Denman observes: — "The late Dr. Bromfield informed me of a case of puerperal convulsions, for which he had bled the patient without much benefit. In the violence of some of her struggles the orifice opened, and a considerable quantity of blood was lost before the accident was discovered, but the convulsions from that time ceased." Of another patient he observes:— "She fell into labour; she became blind, and had one convulsion. Having great sickness at her stomach, without vomiting, I urged her to irritate her throat with her finger, by which means she vomited five or six times, and had no fit afterwards; the blindness remained in some measure for several days after delivery. The child had been dead about a fortnight." The bladder, the rectum, should be evacuated.

III.—On Tetanus.

1073. Tetanus has long been divided into idiopathic and the traumatic. I propose to divide it into the *centric* and the *eccentric*.

Centric tetanus is that produced by disease within the spinal canal itself. Eccentric tetanus arises principally from a wounded, lacerated, or punctured nerve, and possibly from other sources of eccentric nervous and convulsive affection, as deranged stomach, deranged bowels, worms, &c. It is, therefore, both traumatic and idiopathic.

1074. There is a predisposition to tetanic affection in hot climates; sudden changes of temperature, and exposure to cold and damp are exciting causes. In hot climates infants are subject to tetanus within nine days of their birth, as some have supposed, from the condition of the umbilicus.

1075. The spasms first affect the muscles about the neck; then those which approximate the maxillæ, and there is trismus; then the muscles of the pharynx, and the deglutition becomes difficult. The limbs and the whole frame become stiffened by spasm, which is still further augmented by the slightest touch, jar, or excitement. There is constipation. No one can fail to see that these are affections of the true spinal system. The cerebral system is unaffected. Baron Larrey observes:—"The functions of the brain remain unimpaired to the last moment of life, so that the unfortunate victim of this malady perceives himself to be dying."

1076. One fact is observable. The influence of the lesion of the nerve is not only carried by excitor nerves to the spinal axis, and *reflected* upon motor nerves, but it frequently pursues a *retrograde* course along the spinal marrow; a wound of the foot, not less than a wound of the hand, leads to trismus. A similar event occurs in experiments on the decapitated turtle. If one of the lateral nerves be laid bare, and pinched continuously, the muscles of the upper extremities as well as the lower, are forcibly contracted. This is, in my mind, the very *type of tetanus*. The same retrograde action is produced, if, in a decapitated frog, the spine be divided, and the lower end of the upper portion of the spinal marrow be pinched with the forceps.

1077. As in epilepsy, no constant morbid appearances have been found in the cranium or spinal canal.

1078. In an interesting case of tetanus, given by Dr. Reid, in the "Transactions of the Association of Physicians in Ireland," vol. i., p. 113, great vascularity and an effusion of blood, were found round the spinal marrow. In another case, detailed by Mr. Brayne, of Banbury, in the "London Medical Repository," vol. xiv., p. 1, two or three inches of the inferior dorsal portion of the spinal marrow were suffused by a continuous blush of inflammation, and three small, hard, white laminæ were seen between the arachnoid and pia mater. M. Ollivier, on the other hand, shows that such morbid appearances are by no means constant; Dr. Abercrombie and M. Gendrin come to a similar conclusion.

1079. The treatment of tetanus is generally unavailing. Considering the cause of this malady, and its mode of operation, we should be naturally led to propose the division of the injured nerve, or amputation.

There is a successful case of the former operation in the "Medical Gazette," vol. xi., for 1832-3, p. 623. In reference to the latter, Baron Larrey observes, in his "Account of the Campaign in Russia,"—"With the exception of one only, all those affected with this cruel malady died. That one, being wounded in the foot, owed his preservation to the amputation of his leg, performed immediately on the invasion of the first tetanic symptoms. The amputation of the arm or leg was generally successful." These plans have not succeeded in the hands of other surgeons, perhaps from being adopted too late.

1080. I wish I had space for M. Dupuytren's admirable observations in his "Leçons Orales, t. ii. p. 599—612; they are full of interest. He advises that half-divided nerves should be completely divided. He is opposed to amputation as inefficacious when tetanus has actually commenced. He adds,—"The symptoms and the autopsy unite in demonstrating that tetanus is an idiopathic nervous affection, and without organic lesion."

1081. Bloodletting, opium, the hydrocyanic acid, tobacco, mercury, antimony, local depletion, purgative medicines, have been tried, with but occasional success. The cold bath has proved immediately fatal.

1082. The *principles* of treatment would appear to be—1, to divide the injured nerve; 2, to subdue the spasmodic affections, by such remedies as the hydrocyanic acid; 3, to prevent organic changes in the nervous system, by depletion, general and local; 4, to remove all sources of irritation, as scybalæ in the bowels, &c.; and, 5, to avoid all sources of augmented spasm, such as shocks, noises, &c.

IV.—On Hydrophobia.

1083. Another terrific disease of the nervous system, arising from causes acting at a distance from the nervous centres, is hydrophobia.

1084. A wound inflicted, a poison inserted, probably in the substance of the fine fibrillæ of excitor nerves, is the cause of this disease.

1085. After a variable interval, the peculiar symptoms of hydrophobia display themselves. All these symptoms obviously belong to the true spinal or excito-motory functions; they consist in a peculiar spasmodic and terrible *dysphagia* and *dyspnœa*. The parts immediately affected are those which preside over ingestion.

1086. The fifth nerve in the face and in the fauces, and the pneumogastric in the larynx, appear to be most unduly impressible. The impression upon these nerves is reflected upon the muscles of the pharynx and larynx, and the sense of dysphagia, or of dyspnœa, is overwhelming. The slightest motion in the atmosphere, the application of a glass or cup to the lips, the sight or idea of water, or other fluids even, are attended by an agony of suffering,—of mingled spasm, choking, strangulation, and terror.

1087. There are, from the first, extreme anxiety of the countenance and inquietude of manner, and a peculiar aggravation of these appearances at the sight of fluids, or on feeling a gust of air pass over the face, and still more on attempting to drink; by any of these causes an expression of horror, a sense of suffocation, with constriction about the throat, and convulsive movements, are produced, which are terrible to witness, and beyond description. Independently of these causes, there are similar symptoms, only in a minor degree. Later in the disease, the agony of expression and suffering is extreme; viscid saliva forms and collects in the mouth, and is removed with impatience and horror, and spasm about the throat; the mind begins to wander with a terrible delirium; the limbs are moved with continual spasm and agitation. At length the powers of life and of the disease sink together.

1088. M. Gendrin, in a note to his translation of Dr. Abercrombie's work, ed. 2, p. 578, remarks,—"I have observed several cases of hydrophobia, and have assisted at the examination of still more; only a few months ago I followed this horrible malady from the first symptoms until its fatal termination. I have never seen the slightest trace whatever of inflammation, or of lesion in the cerebro-spinal organs, or in the ganglionic nerves. The only lesion which I have recognised is a considerable development, generally inflammatory, of the mucous follicles at the base of the tongue, in the pharynx and the superior orifice of the larynx. Patients affected with hydrophobia die asphyxiated; after death, as in cases of tetanus, a marked degree of congestion is found in the pulmonary veins; a general state of congestion of the principal viscera, and particularly of the brain, and liquid blood of an obscure red in the vessels."

1089. The treatment of hydrophobia has hitherto been abortive; every remedy which the terrors of the disease, or the ingenuity of physicians could suggest, has been tried in vain. Dr. A. T. Thomson's case was apparently mitigated by the hydrocyanic acid. Mr. Mayo has ingeniously suggested the propriety of tracheotomy. If a case were committed to my charge, I would combine these two modes of treatment. The strychnine might induce tetanus, or hydrophobia, but can never cure it, except upon a principle of similia similibus.

V.—Hysteria.

1090. Vast, indeed, is the distance which separates hysteria from epilepsy, yet how *similar* are the symptoms of these two dis-

cases. There is *one* great distinction,—in hysteria, much as the larynx may be affected, it is never closed; in epilepsy it is closed; in the former we have heaving, *sighing*, *inspiration*,—in the latter *violent*, *ineffectual efforts* at *expiration*; in the former the cerebrum, the true spinal marrow, are comparatively unaffected; in the latter they are in a state of apoplexy and of irritation.

1091. Hysteria frequently depends upon the state of the stomach and bowels; still more frequently, as its designation implies, and like epilepsy, it arises from various conditions of the uterine system; and very frequently it is connected with the state of the mind and emotion,—*cause* and *effect*.

1092. Some seem to imagine that hysteria is a *feigned* disease,—this it is not; it is *real* enough, but it is generally *exaggerated*. This is, I believe, the true view of the matter; to this the peculiar condition of the mind seems to give origin.

1093. Hysteria seems to single out and affect every organ, every function which belongs to the true spinal system. Like the emotions it also affects the action of the heart, the secretions, especially that of the kidney, &c. I will merely add, in this place, the following table of the parts obviously under the dominion of the true spinal marrow, which are affected in this multiform disease:—

1. *The larynx*,—imitation of croup; apparently imminent suffocation.
2. *The pharynx*,—dysphagia.
3. *The respiratory organs*, — dyspnœa, cough, hiccough, retching, and vomiting, &c.
4. *The cervix vesicæ*,—dysury, retention.
5. *The muscular system*,—trismus, tetanus, contracted hand, distorted foot, twisted legs, &c.

The rest relates to emotion, which is the magna pars of hysteria, as hysteria, in its turn, is in the deluded and the deluding, the magna pars of Mesmerism, animal magnetism, or by whatever other ridiculous term so ridiculous a thing may be named.

VI.—Chorea.

1094. Chorea is distinctly an affection of the true spinal system; it affords an example of the want of harmony between the cerebral and the true spinal acts; the *volition* is normal; the true spinal action is abnormal. The *action* is abnormal, or irregular, for want of a precise harmony between the two.

1095. It is by acts of volition that the acts of the true spinal system are called into play; it is, therefore, when volition is excited, that the chorea is most distinctly manifested. The articulation and all the voluntary movements are irregular and impaired; the same thing is observed on any emotion. During sleep and repose, on the contrary, the chorea is mitigated, or disappears altogether, especially in the early stage.

1096. That chorea is excited through a morbid state of the bowels, there can be no doubt; it ceases frequently on removing this disorder. It involves, however, a morbid condition of the true spinal system, which certain tonics, and especially the arsenicum and the carbonas ferri, remove. It is, however, in the beginning not a centric, but a centripetal disease.

1097. Chorea frequently assumes a hemiplegic character; that is, it affects one side more than another; it also passes on from irregular motions to a sort of paralytic weakness; and eventually the mind, as well as the limbs, becomes enfeebled. Like some other true spinal diseases, centripetal in their origin, chorea becomes centric and cerebral in its course before its fatal issue.

VII.—Stammering.

1098. Stammering is very like a very partial chorea; it is not, I think, as Dr. Arnott supposes, an affection of the glottis, that is, of the organ of the *voice*, but of some of the different parts which constitute the machinery of *articulation*. For a disquisition on this point, I refer you to the Journal of the Royal Institution for Feb. 1831; I have there given my reasons for adopting a different view from that of Dr. Arnott, and have explained the various forms of stammering on the principles of the physiology of the articulation of the different orders of letters.

1099. In stammering, in fact, the act of volition is rendered imperfectly an action, independent and subversive of the will, and of true spinal origin. In some instances an act of *inspiration* is excited at the same time, which is equally involuntary.

1100. Stammering, as a disease, is sometimes induced by a morbid condition of the intestines, acting through the incident nerves. Dr. Bostock has recorded such a case in the "Medico-Chirurgical Transactions," vol. xvi., p. 72; it was cured by purgative medicines.

1101. In all cases this affection is aggravated by indisposition and by emotion or agitation. It is best remedied, when not hereditary, or inveterate, by attention to the general health, and especially by purgative and tonic medicines, and by acquiring a habit of self-possession, and of speaking in a subdued, continuous tone, first dilating the thorax.

1102. I had one interesting case in which *attacks* came on from time to time, of a peculiar loss of speech; on attempting articulation the patient drew an inspiration, making a hissing noise between the lips, and

suffering acute pain around the false ribs, about the insertions of the diaphragm.

I have just seen the FOUR articles in the "British and Foreign Medical and Surgical Review." If the malice of its editors and writers were less apparent, I might have noticed them; but it is too glaring, and at the same time too feeble, an attempt to do me an injury, to deserve any reply from me. I am sorry to see Dr. Alison *repeat his* anonymous attacks.

LECTURES
ON
MATERIA MEDICA AND THERAPEUTICS;
NOW IN COURSE OF DELIVERY
AT THE
WINDMILL-STREET SCHOOL OF MEDICINE.
BY
GEORGE G. SIGMOND, M.D.

FERMENTATION.—*Divisions of this process adopted by Fourcroy; circumstances necessary for fermentation; moisture, heat. Vinous fermentation; the grape and its species. Accidental discovery of wine. Medicinal effects of the grape diet. Classification of wines. The wines of France; their qualities. Wines produced by Germany. The wines of Spain.*

GENTLEMEN:—I have now to solicit your attention to a most important subject,—the spontaneous changes in the vegetable kingdom of which man has availed himself for the obtaining several products of the deepest importance to his health, to his proper nourishment, and to his enjoyment.

When that power, to which we assign the name of life, ceases to be exerted in vegetable matter, by which its particles are held in cohesion, and form certain tissues which compose organs, by which various functions are performed, the molecules separate from each other; the attraction that existed between the particles of which it was composed ceases, and these enter into new arrangements with each other, and with the particles of the bodies by which they are surrounded, and are likewise acted upon by radiant matter, by caloric, and by light. Decomposition occurs; but, by one of the wondrous laws of nature, not a single particle of the original body is lost in creation; it only assumes a new form, and combines with some other body, and thus an eternal chain of movement is going forward. The ultimate change is to reduce a vegetable to some of the elementary bodies of which all objects are composed, and which only unite to form the simplest bodies; thus, the hydrogen unites with oxygen to form water, and with nitrogen to compose ammonia, and carbon seizes upon oxygen to form carbonic acid. Still there are many states perceptible; there are different intermediate stages, when striking characteristics and peculiar properties are marked in the subject of decomposition, and when further changes can be arrested, and a compound obtained that may be employed for the purposes of supplying the wants of man.

Chemistry,—after long and patient investigation, after unwearied observation of the phenomena which present themselves,—has distinctly pointed out to us the succession of these alterations; and the one to which I now have to refer you, is that natural analysis of vegetable life to which the name of fermentation has been given, and which, since the days of Boerhaave, has been distinguished into three several stages, which follow upon each other: the spirituous, the acetous, and the putrefactive. These have been subdivided by some philosophers:—thus, Fourcroy has admitted five species of vegetable fermentation; the first, the saccharine; the second, the vinous; the third, the acid; the fourth, the colouring; and the fifth, the putrid fermentation. I shall, however, as the most simple distinction, take that which is most easily explained, and, at the same time, fully embraces all that is necessary for you to be acquainted with.

There seems to be some circumstances absolutely and indispensably required for the production of fermentation, without which, although certain changes may proceed, they are simple decompositions. Thus, water is a most important agent; indeed, without it, no vegetable matter can undergo the process. This is so evident, that one of the great objects attended to, by those who preserve seeds, roots, leaves, flowers, or fruits, is to obtain the utmost dryness. One of the most important cares of the herbalist, and of those who make our pharmaceutical preparations, is to take every precaution that the pulps, the gums, the oils, the extracts which we employ, should be reduced to the most absolute state of dryness; the least humidity admitted would be most injurious. Another point is the due admission of heat; there is a certain temperature at which only, this process can go forward; below the freezing point it never can occur; but different vegetable bodies demand different degrees both of heat and of moisture. Some seek only a very small quantity of moisture, and not an elevated degree of temperature; whilst others, again, are not susceptible of the due degree of change, unless large quantities of fluid, and much caloric, are present. Much of the superiority in the different products, in their qualities and characteristics, are necessarily dependant on our due acquaintance with all the points connected with this interesting series of changes, and the consequent developments.

The term fermentation was, from a very early period, very indiscriminately employed to every change that took place, whether in an organised or an unorganised body, of which the effects were certain, but the causes unexplained; it was used in a loose, vague, and undefined sense, to any spontaneous change that occurred, and it seems to have been one of those useful words that everybody uses, and nobody understands; of this the ancient physicians availed themselves when they fancied they were explaining their physiological doctrines, and the alchemists when they saw changes going forward in the objects of their studies which they did not precisely comprehend. It is now used in a definite manner, to denote that series of extensive changes which take place in vegetables, accompanied by an internal movement which agitates them, elevates them, and throws their particles into new unions. The process is spontaneous; but it is to be noticed, that if there be added to a mass of vegetable matter, in a state approaching to fermentation, a substance that has already undergone the fermentative action, even if it be added in a very small quantity, the whole matter passes with much greater quickness into the fermentative agitation, and undergoes the stages of the process with greater facility. This is the principle in the making bread; the dough of wheat is induced to ferment more quickly upon the addition of dough or of yeast that has already fermented, and which is known to us by the name of leaven. It was at one time supposed that no fermentation would take place unless some foreign body, already fermented, were introduced; this is, however, now known not to be absolutely necessary. As a saccharine matter is requisite to produce the vinous fluid, Fourcroy has denominated the first step the saccharine fermentation, and he bases this upon the fact, that insipid substances cannot undergo this change, but there must be a transition to a saccharine state before any effect can be produced. That the cereal grains must acquire saccharine matter before they germinate and ferment, is true, and that in the maturation of fruits a saccharine matter is developed, which alone fits them for the formation of those beverages which are obtained after fermentation, is also to be admitted; but all that can be said, as no internal motion is visible, is, that a saccharine matter is necessary for the spontaneous alteration that takes place.

The most striking illustration of the subject that I can offer you, is the series of changes that you will observe if you dissolve a quantity of sugar in water, and add a little yeast, or any body that has already been subjected to fermentation; expose this fluid to the action of the air, at a temperature of about 70 deg. After a little time you will find that there is a considerable internal agitation; that the fluid has become turbid, and likewise frothy; you will see a quantity of bubbles rising up through it till they reach the surface, and there burst; this is that extraordinary gas called carbonic acid, and which soon becomes more and more abundant; mucilage is separated; part of this sinks to the bottom, whilst a part of it forms yeast, and may be employed to bring other vegetable matter to the same state. These agitations and changes in the fluid continue for several days, according to the quantity of matter, and some time occurs before they entirely cease. If you now taste the fluid, before so sweet, you will find that a very extraordinary series of alterations have taken place; it is pungent and spirituous; it has become agreeable, not from any saccharine flavour, but from its peculiar warmth and aroma; its specific gravity is diminished, and from this, by distillation, may be obtained a light inflammable spirit.

Sugar and water alone could not undergo the vinous fermentation, some foreign matter must be superadded, and this matter is contained in the juices of the different fruits which are subjected to this process; they all are capable of developing their fecula, their mucilages, and those various component parts which enable the fermentation to go forward. Of all the vegetables with which man is familiar none yields up a more striking vinous fluid than the grape, nor is there any which, whilst its general characteristics are the same, so essentially differs in the variety of modifications which its product is capable of assuming; it is not upon its property of containing more saccharine matter, nor upon the presence of any peculiar constituent body, that its excellence depends, for the sugar-cane abounds with saccharine matter, and many fruits have their vegetable composition apparently more perfect, or particular juices more strikingly developed; but all its chemical principles seem united together in so harmonious a manner, that there is produced the most homogeneous, the most uniform, and the most agreeable combination which has been found by the universal testimony of mankind from its earliest records, to be the best adapted to his wants, his wishes, and his happiness. The vine, vitis vinifera, must have been known from the earliest periods; and sacred history tells us, that Noah planted a vineyard, and that he drank of wine; the Hebrew word, which signifies to squeeze, or to express, has been retained in almost all languages with very little variation; it is the Οινος of the Greek, the vinum of the Latin, the vino of the Spanish, and the Italian, the wine of English, the wein of Germany, the gwin of the Celtic, the uin of the Cambric, and in the Danish, the Dutch, and the Saxon, it exists. Dr. Sickler considers the vine of Persian origin,

and the mountains of Ferdistan, it is said, first supplied wine, and that of Shiraz is obtained from thence; and Jem Sheed, the founder of Persepolis, has, amongst the antiquarians, now carried away the honour of being considered the inventor of wine. The Persian writers say, that being fond of the grape he was desirous of preserving some of a fine quality, and that he ordered them to be placed in a vault, in a large vessel, for future use; in this situation the process of fermentation went forward, but their juice having been tasted was found immature, and supposed to be poisonous, and the word poison was accordingly affixed upon the vessel containing it. His favourite sultana was affected with a nervous headach which so overpowered her that she determined on suicide, and for this purpose swallowed some of the suspected liquid; she drank so much of this, which had now become wine, that after undergoing some pleasing sensations from its effects, she fell asleep, and was so much satisfied with the experiment that she had made, that she had recourse to this remedy until the whole of the poison was drank. The monarch, however, from some circumstances, was led to make inquiries, and the lady having confessed what she had done, taught him to follow her example upon another occasion; the whole court was delighted with the experiment, and to this day Tehere Kooshon, the delightful poison, is as much sought after as it is elsewhere. The juice of the grape consists of water, of sugar, mucilage, jelly, albumen, gluten, supertartrate of potash, and the tartaric, the citric, and the malic acids; but these principles, under certain circumstances, undergo a most extraordinary change, a completely new arrangement is entered into, by which wine and acetic acid are developed; these principles are found in all the varieties of grape, from whatever species of vine it may be obtained, but they differ in different climates, soils, and under various circumstances of exposure to light, to heat, to air, and to water. The varieties of the vine are numerous, and any attempt to classification seems useless. M. Dumont reckoned nineteen distinctions in one vineyard, for soil and cultivation seem to modify its growth in the most extraordinary manner. The grape essentially differs in form, in size, in colour, and in taste; the colour is entirely in the skin, the pulp being uniformly the same in all. The bloom which gives such a beautiful appearance to the grape has been considered to be a proof of the due cultivation and attention to the vine. There has been lately a fashion prevalent in Germany of sending patients affected with various diseases to the vineyards for the purpose of eating the mature grape, but it seldom appears to have produced any marked influence on pulmonary affections; but where the digestive organs are deranged some good effect has occasionally been the result. Dr. Granville, who made particular inquiries upon this subject when in the vicinity of the vineyards to which people have resorted, states, "That people labouring under inveterate affections of the stomach, frequent indigestions, nervous irritability of the digestive organs generally, bilious headachs, following upon an obstinate condition of the bowels, soreness, or tenderness of the abdomen, and, in fact, suffering from the proteiform series of symptoms which accompany diseases principally seated in the stomach, or accessory organs, requiring strict diet and pure country air, cooling medicines, and the total absence of animal food, have been recommended to pass from a fortnight to three weeks, or a month at, or in, the neighbourhood of Rudesheim, at the beginning of the vintage season, and to eat nothing but grapes during the whole of that time; two or three pounds of grapes are eaten daily; these should be immediately eaten from the tree, and the only thing allowed with them is a small quantity of bread. Those who can walk are recommended to pluck their morning portion of grapes from the tree; the second portion, about a pound, is eaten at dinner, or about two o'clock, and the remainder at sunset. The hours for retiring to bed are from eight till nine, and the patient rises with the sun. This treatment admits of no medicine or other article of food with it; this diet brings the action of the bowels to a proper standard, quiets every symptom of irritability and nervous excitement, removes headach, improves digestion, procures sound and refreshing sleep, restores a proper degree of coolness to the skin and mouth, and inspires the patient with cheerful ideas and bright prospects." The miraculous effects of which we have so often heard, are, as Dr. Granville observes, in perfect accordance with the best notions respecting the modes of treating stomach complaints connected with indigestion. What these complaints require is a cessation on the part of the affected organ from all ordinary operation; in other words, "a few holidays from the fatigue of eating and drinking, and the cure de raisins is perhaps as good a way to keep holiday as any that can be recommended." This vegetable diet is, in some individuals, productive of much future mischief, and sometimes, later in autumn, diarrhœas and dysenteries have succeeded upon the grape system. It is, however, not uncommon to meet many of our countrymen on the banks of the Rhine, who have taken a journey for this purpose, not aware that their habits of life render them much more liable to various affections which the peculiar modes of German domestic economy render less frequent in the natives. There is another reason for which the neighbourhood of vineyards has been sought by married

ladies: the odour of the vine has been long supposed, and the idea exists in various countries, to have a peculiar effect in obviating barrenness, and the odour is said to induce fecundity in the human species only. At the time the vine blossoms the aroma is very delightful, and in the East the people are very fond of sitting under their vines during the season; it has likewise been observed that where it is much cultivated intermittent fevers very rarely occur, but this may be owing to the preference which the plant gives to light, dry, stony, or sandy soils, and the aversion it has to any soil which is at all infected by stagnant waters; there is a limpid distillation of the sap, called the tears of the vine, at the time the plant begins to bud, which has great reputation in vine countries as possessing the power of keeping off various diseases, and this liquid is generally collected in a bottle.

All the circumstances connected with the growth and management of the vine are of very great interest; but I must not trespass on your very valuable time with them; I must refer you to Henderson, to Redding, amongst the modern inquirers, to Sir Edward Barry, to Chaptal, to Dr. Maculloch, for many of the most interesting facts. Almost all those who have written upon the subject have been medical men, and they have given medical hints; and Barry has shown great knowledge of the classic physicians, as well as of the best writers upon the wines of the ancients. The wine of Hippocrates must have been very different from that which is now drank in Europe, though it may probably still be found in Greece; thus, in Cyprus, an old thick wine, answering to that which is described by the Father of Physic, is even at this day the established therapeutic agent for tertian and quartan agues. It is evident that the ancients bruised the fruit with their feet, and several scriptural expressions point this out; thus we find in Isaiah, "Wherefore art thou red in thy apparel, and thy garments like him that treadeth in the wine vat?" The fluid then appears to have been concentrated either by evaporation, or by boiling; at least such must have been the case amongst the Greeks and the Romans, for Aristotle speaks of the Arcadian wines, which required to be diluted with water; and Pliny of others as thick as honey, which required to be dissolved in warm water, and filtered through linen. Most probably this was from spontaneous evaporation, for they kept their wines an immense length of time; the shortest period, according to Galen and to Aristotle, was seven years, but sometimes two hundred was the date.

Chaptal remarks that these beverages were rather extracts, or syrups, than wine. They were fond, too, of flavouring their wines with different substances, such as the turpentine of Chio, and pitch. Homer describes the Maronean wine as so powerful as to require to be mixed with twenty measures of water. The most ancient of the wines employed medicinally was the Pramnian, an astringent red wine, which came from one of the islands, and was often called, from the uses to which it was applied, pharmacites.

One author alone, Horace, would be sufficient to show us the high estimation in which some of the wines of Italy were held; that of Falernum seems to have borne away the palm. The sweet luscious wines of Lesbos, Chios, and Thasos, were the favourites amongst the Greeks. That intoxication, or forgetfulness of the cares of life, was not uncommon, we learn from the classic writers; and the sternest philosopher, and the loveliest of women, are handed down to us as occasionally indulging in the juice of the grape; for even "dicitur et prisci Catonis sœpe mero caluisse virtus;" and the beautiful Cleopatra is reported to have had her reason "lymphatam mareotico."

The best classification of wines is that adopted by Fourcroy, into red and white. Jullien has tried to arrange them in genera, or orders, according to their qualities of sweetness, of dryness, of colour, and of body; and into species, according to the peculiar qualities which they possess. The difference of the colour of the wine may depend upon the length of the time the wines have stood in the vats, but not upon the colour of the grape from which they are pressed; those that have remained for a great length of time have extracted all the colouring matter from the husks of the grape, whilst the lighter wines are drawn off before this tinge can have been acquired; but if white wine be required, it is requisite that the grape should be neither bruised nor shaken on the way to the press, or the colour is disengaged from the skin, which produces what is called "the partridge-eye;" the red wines, however, are bruised, or trodden, previous to pressing, by which means the colour is disengaged, when they are thrown into the vat. Each kind of grape has its own peculiar manner of fermenting, and each country has its own particular arrangements for its vintage, its mode of culture of the vine, its gathering of the grape, and its process for obtaining the wine.

Although the wines of Portugal and of Spain are admirably adapted, with the modifications they undergo, for the constitutions of the inhabitants of these islands, yet France must be acknowledged to be the land of the vine, and her sons to be the wine-makers of the world. The diversity of surface of the country, the congenial strata, the gentle acclivities, the clear sunny sky, the range of temperature, are all in her favour; whilst the experience, the industry, and the chemical investigations of men, both

practical and scientific, have been directed to produce vines of the best growth, and wines rich in all those qualities which are esteemed. The wines of France are better adapted for the health of the greater number of the inhabitants of the earth than those that are elsewhere obtained; they excite the nervous system; they invigorate the digestive organs; and they are agreeable to the palate. Those that are called Burgundy wines, are superior to all others; their constituents are admirably combined, and there is no one principle that predominates; they are rich in flavour; and the titles given to the Dukes of Burgundy in former times was highly appropriate—the "Prince des bons vins." They are remarkable for an aromatic smell, which is perceived when the cork is drawn from the bottle, and which, from the combination of aromas, is called the bouquet, and which the amateurs prize most highly. In this country we have little opportunity of judging of the infinite variety and delicacy of taste of the finer wines of Burgundy, for the journey to the coast, and the voyage from Calais to Dover, materially affects them, and deteriorates them in a very marked manner. The choicest of them is almost unknown in England, the Romanee St. Vivant, and the Romanee Conti. The most perfect and best wines are produced in very small quantities, the vineyard of the latter not being more than six and a half acres in extent. Some wines lose their reputation, and are depreciated, from their falling into the hands of new proprietors; thus the Clos Vougeot once, when it formed a part of the domain of the church, was the most celebrated of the class, but it is now ranked as the third or fourth growth. The red and white Chambertin, the Nuits, the Beaune, the Volnay, the Pomard, the Mont Rachet, the wines of the Cotè d'Or, the Chablis, the Macon, are all of them Burgundy wines.

The wines of the Rhone, or the old division of France, of Dauphiny, are amongst the most ancient of those that have been grown, though those that are now most prized were formerly little known; of these the most celebrated is the Hermitage; it derives its name from the ruins of a hermitage on a rock on which the vineyard is situated. It is said that an inhabitant of the town of Condrieux turned hermit, and employed himself on the spot now converted into a vineyard, by breaking the stones and rocks which surrounded his dwelling, and planting some slips of vine, which succeeded most unexpectedly, and produced the wine now so well known. It is divided into five different classes. It varies very much with the different seasons, and the produce of which, when the season is bad, is generally little estimated. It does not improve by long keeping, and after twenty years becomes worthless. Red Hermitage has the character of being a descendant from the celebrated wine of the Persians, the Schiraz; and the vine from which it is produced, is called the Sirus. White Hermitage is obtained from the Marsanne and Rousanne grapes; the straw Hermitage is made from white grapes, most carefully selected, dried on straw for six or eight weeks, and then pressed; this wine is highly valued; it is sweet, rich, and very agreeable to the taste.

The Cote Rotie, the Condrieu, the St. Perai, the Chateauneuf de Pape, the Lunel, have all their peculiar characteristics, and their staunch admirers. Whilst Languedoc, Provence, Rousillon, give the Savel, St Geniez, the Rivesaltes, the Frontignan, the latter of which is distinguished by its exquisite flavour, its luscious sweetness, its oily smoothness, and its fragrant aroma. The wines of France that are most familiar to us are those that grow in the immediate vicinity of Bordeaux. The wines of Gascony and Guienne have long been much liked throughout Europe, and Claret is better known in England than any other of the wines, Champagne excepted. Claret is a mixture of several sorts of wine; it is a particular manufacture called Travail a l'Anglaise, which consists in adding to each hogshead of genuine Bordeaux wine, three or four gallons of Benicarlo, with a little Hermitage, and sometimes Alicant. This compound is allowed to ferment; the strength of this wine can never be exactly estimated, as each manufacturer makes up his own, and sometimes the weakest wines are used, and raspberry brandy added. There are no vineyards, however, where finer or better wine is obtained, and Medoc, Grave, Chateau Laffitte, Chateau Margaux, Latour, Sauterne, Barsac, are amongst the most delicate and most esteemed of wines. The wines of Champagne have found most admirers of all the wines of France; they are divided into the sparkling, the half-sparkling, and the still; an Englishman and a Russian prizes only that which effervesces, but a Frenchman prefers those which froth least; the Sillery, which has no sparkle, is probably the favourite. It has more body, is more spirituous, and has a more agreeable taste. Many, however, prefer the Champagnes of Ay; they are very light, very delicate, and preserve their effervescence and their powers to a great age. At Epernay is a black grape which produces a luscious wine. Cramant, Menil, are sweet and lively wines. The wines of Spain would probably be the first in the world, if some improvements which have at various times been suggested, were followed up. With all the disadvantages, however, they have some excellent white wines; and although English taste prefers those that have been much adulterated with brandy, there are some pure wines which cannot be surpassed in any country in the world.

Those made at Xeres, in the province of Andalusia, and known to us under the name of Sherry; that which is called Paxarete, or sweet Sherry, the Tenta de Rota, or Tent wine; that which comes from Granada, the Malaga, or Mountain; from Valencia, the Alicant; from La Mancha, the Val de Penas, all deserve very high commendation, and might, by attention, be made the choicest beverages of the epicure. The Portuguese wines known to us are Port and Lisbon; these are coarse productions, are generally much made up, yet, as I shall have occasion to show you, when speaking of the medicinal effects of the various wines, and their different dietetic qualities, form a very serviceable beverage, without which the inhabitants of this country would, I firmly believe, not enjoy many of the comforts of life, nor be capable of sustaining the vicissitudes of climate, the peculiarities of diet, and the excitement of the nervous system which so strikingly belong to the great mass of English society.

Germany has a very fine wine country, extending along the banks of the Rhine from Mentz to Coblentz; the Rheingau, the Hockheim, the Joannisberg districts furnish the *bon vinans* of Europe with some light agreeable wines, as do the banks of the Moselle. Hungary, Italy, Madeira, the Cape of Good Hope, all furnish localities on which grows the vine, from which various kinds of wine are obtained, and to all these, as means by which health may be promoted and disease alleviated, I shall next direct your attention. I can only regret that I cannot enter on a detailed history of the varied and multiplied species of wine, and describe the qualities which each possesses; for there is open a wide field for medical inquiry, which has not yet been sufficiently trod, but it would amply repay the judicious investigator. The chemical science has now thrown such a light upon vegetable analysis, that what could only be treated formerly in a very cursory manner, can now be most minutely examined, and with the happiest results. The importance to man of this product would fully justify the most intense labour, which, doubtless, would be amply rewarded.

PNEUMONIA IN CHILDREN.—When pneumonia attacks children after the age of six years, the prognosis is very favourable at this age; the disease (if without complication) is rarely fatal. Careful observations, made at the Enfans Malades, Paris, show that the mortality rarely exceeds one in forty.

POTT'S DISEASE.

To the Editor of THE LANCET.

SIR:—May I beg the favour of a place in THE LANCET for the accompanying interesting case. I am, Sir, your obedient servant,

MARSHALL HALL.

21, Manchester-square, March 17, 1838.

CASE OF HANNAH BLAIR.

INFLAMED AND ULTIMATELY CARIOUS DORSAL VERTEBRÆ, WITH PARAPLEGIA.

The lower limbs totally devoid of sensation, yet admitting of the excitement of powerful involuntary movements on the application of irritation to various parts of the non-sensitive surfaces.

By WILLIAM ELLIOT, *M.D., Carlisle, authenticated by other Medical Practitioners.*

Six or seven months ago, I first saw Hannah Blair, a poor Irish girl, in her seventeenth year, of rather ruddy countenance, auburn hair, and tolerably stout frame, who laboured under paraplegia with rigid flexion of the lower limbs; slight antero-posterior curvature of, and an apparently fluctuating swelling over, the fourth, fifth, sixth, and seventh, dorsal vertebræ, very tender to the touch; much pain of the back; sense of heat in the sacrum and lower extremities, which to another felt of natural warmth; sense of constriction across the abdomen; pulse ranging from 100 to 130, rather weak; appetite good; some sensation of the faeces and urine when about to be expelled, but these were often voided involuntarily. She had had a catamenial discharge only once. To its farther non-appearance, and to grief on account of the death of her father, after a short illness, her disease was attributed by herself and her friends. She had been previously bled, and had taken medicine without much benefit.

The loss of sensation and motion continued complete, involving the lower part of the body nearly as far up as the umbilicus, and in its entire circumference. Cupping, a seton, and a caustic issue, were resorted to in that order, without any apparent benefit. Laxatives were not often given (croton-oil twice or thrice), the bowels being free. Mercurials were administered at first, but were discontinued on the appearance of the abscess. The issue was kept open, and during the month of September I saw her only twice.

About the 8th or 10th ult., when once more inquiring if there were no sensation nor voluntary motion of any portion of the lower half of the body, I was informed that there was, as yet, not the slightest feeling, but that powerful involuntary movements had been observed during the preceding week, produced in various ways. Sometimes they were mere tremors, and were even excited by causes acting through the mind—as sud-

den starts; at others, violent flexions and extensions of the lower limbs, produced by grasping them in turning her, or, still more strikingly, because in continuous alternations, by rubbing the abdomen. This had been discovered a few days previously, by a neighbour, who was desired to rub the girl's abdomen with a view of relieving the cramp and feeling of constriction; the effects of which operation, in throwing the thighs and legs into violent movements of flexion and extension, so startled the woman, that she then ran out the house, and was afraid for some days to repeat her visit. This account aroused my curiosity, which I proceeded to satisfy by the following experimental investigation:—

Oct. 10. There appeared to be no sensation from a little above the crest of both ilia downwards, on pinching, rubbing, and scratching with a pin. Friction with the hand over those parts of the abdomen devoid of sensation, and over the ilium, on the right side, produced, when the girl lay on the left side, powerful extension of the right leg and thigh; *i.e.* the limb, if previously bent, became straight, and was forcibly moved backwards. Friction over the sacrum caused instant flexion of the knee and thigh. Friction of the corresponding surfaces on the left side produced very irregular motions of the left lower limb.

Oct. 13. Present Drs. Hudson and Atkinson, and myself. Extension and flexion of the right limb could still occasionally be produced at will, as above, viz., by friction of the abdomen and of the sacrum respectively; though sometimes, also, the motions were irregular or indiscriminate. Scratching over the right glutæal muscles with a pin until blood appeared, produced movements without indication of feeling; the girl also asserting, when interrogated, her unconsciousness of anything having been done at all, except such information as she derived from the different sounds produced. (The left side was not tried on this occasion.) Irregular motions were also produced by nipping and scratching the thigh, leg, and foot, a little more readily, as it appeared to me, when the irritation was applied in the course of the large nerve in the thigh, ham, and inner ankle.

Oct. 17. Present Drs. Barnes and Hudson, and myself. The motions of the right limb were now produced as irregularly as those of the left, it being now impossible to predicate flexion or extension, on the application of friction, nipping, pricking, or scratching. Water, nearly boiling hot, was applied to the right nates, without any observable effect.

Oct. 23 Present Dr. Hudson and myself. Particular care was taken to prevent the girl from seeing, or being otherwise sensible of, the application of irritation. Pricking the soles and ankles, and half-way up the leg, gave rise to powerful movements, especially when practised over the course of the posterior tibial and the plantar nerves. These movements were frequently such as to impel the part pricked or scratched, forcibly towards and upon the instrument used.

A few days afterwards a slough, which had spontaneously formed over the summit of the tumour, escaped, exposing a quantity of originally fibrous and ligamentous tissue, thickened, whitened, and, apparently, converted into a substance resembling adipocire. In less than a week this came away, its discharge being followed by a copious flow of pus. There was now experienced, for the first time during the past half-year, a very slight degree of sensation, in the left side of the pelvis, and in the left thigh, when nipped or scratched, but without any return of voluntary motion, the involuntary movements being still excitable in, and by irritation of, these parts. Those parts, also, included between the respective levels of the umbilicus and cristæ iliorum, now seemed, all around the body, to have regained a tolerable degree of feeling.

Nov. 3. Dr. Hudson and myself observed the above conditions. The right limb being still devoid of sensation, below the junction of the middle and upper thirds of the thigh (the right half of the pelvis, and the region of the right hipjoint having now imperfect sensation), a contrast was thereby established between that limb and the left,—the imperfect sensation enjoyed by the latter having by this time reached the sole. Pricking, scratching, &c., the right limb from above the mid-thigh to the toes, appeared to give, and the girl asserted did give, no uneasiness—nay, were not at all felt; while a single scratch or puncture of the left thigh, leg, and foot (momentarily and *unperceivedly* inflicted in the course of the frequent unfelt irritations of the other limb) called forth querulous expressions of pain, involuntary movements, both from and towards the pin, being at the same time excited.

Nov. 6. My friend and relative, Mr. Weir, surgeon in Cannobie, Dumfries, happening to be in Carlisle, saw the girl with me on this day. What he observed is detailed in the document to which his name is attached.

Nov. 11. On this day I saw her in company with Mr. Graham, surgeon, Longtown, when the same phenomena were observed as by Mr. Weir. The pulse continues at about 130 per minute, small, and weak; countenance natural, cheerful, and even somewhat rotund and healthy; nates and hips erythematous; a cavity of an inch diameter occupying the centre of the tumour, within the upper margin of which the finger encounters a rough and denuded spinous process, at half an inch depth from the surface; body and limbs less emaciated than might have been expected; the lower limbs never found by me relaxed or flabby, nor yet the flesh

very firm or rigid, but I do not remember ever having either made or seen an attempt to move the joints of the lower limbs, which was not instantly followed by the induction of rigidity, resistance, or forcible movement.

WILLIAM ELLIOT, M.D., &c.
CHRISTOPHER HUDSON, M.D.
WILLIAM GRAHAM, Surgeon.

Carlisle, Tuesday, Nov. 14, 1837.

I this day saw, in company with Dr. Elliot, Hannah Blair, a young woman, with apparent disease of three or four of the upper dorsal vertebræ, over which there is now a small sloughy and discharging sore. She labours under that form of paraplegia distinguished by Pott from common relaxed paralysis, as being characterised by occasional rigidity, and involuntary spasmodic movements of the lower limbs. As far as can be observed, on blindfolding the patient and pricking or scratching the soles and insteps of the feet with a pin, and pinching the skin of the legs and thighs, those parts of the right limb below the knee, seem entirely destitute of sensation,—the corresponding parts of the left seem to possess a very imperfect degree of sensation, as do also the parts above the knee in both, while both the limbs are apparently, and to the belief of those who see her daily, and according to the girl's own statement, entirely destitute of the power of voluntary motion.

On pricking, scratching, or pinching the skin of the left foot, indications of sensation of pain occur, and the girl asserts she feels pain; at the same time irregular movements of the left toes, left foot, and left leg, and sometimes of the thigh also, follow, over which she has no control.

But, on irritating the integuments of the right foot in a similar manner, there is not, even when blood is drawn, the slightest indication of pain; the girl asserts she feels none; and irregular muscular movements of the right toes, foot, leg, and thigh, are produced. These movements are sometimes those of flexion, sometimes those of extension, and are not those producing a withdrawal of the limb, or such as would appear the natural result of the sensation of pain in the part irritated.

JOHN WEIR, Surgeon,
Cannobie, Dumfrieshire.

Carlisle, Monday, Nov. 6, 1837.

Extract from a Letter of Dr. Elliot, to Dr. M. Hall.

"Carlisle, Saturday night,
"Nov. 18, 1837.

"Sir,—From the imperfect acquaintance I have hitherto been enabled to make of your views respecting the intrinsic reflex function of the spinal marrow, I am induced to believe that the accompanying case will supply a desideratum in your chain of evidence of the non-intervention of sensation in the occurrence of what you term excito-motory phenomena.

"Considering the case to be rare, and of some consequence in illustrating the simple proposition, unconnected with any theory, that muscular movements may be excited through the medium of spinal nerves, without the intervention of sensation,* I offer no further apology for its obtrusion on your notice, but leave it at your entire disposal, and am, Sir, yours with respect,

"WILLIAM ELLIOT."

"P.S. The girl is in exactly the same condition as on the 14th."

On Thursday, 22nd inst., and again today, 24th, we have repeated our examination of Hannah Blair, and have to report the following particulars of her case.

Temperature natural; pulse 130, small; countenance pretty full, ruddy, cheerful; tongue natural; appetite tolerable; seldom has occasion for medicine; feels the solicitation of fæces and urine, and gives notice of their readiness for expulsion, but in case of delayed assistance passes the latter involuntarily; no return of menses.

Six pieces of bone (four of which are inclosed) have in all been discharged from the sore in the back. This lies between the inferior angles of the scapulæ; it is still deep, but much smaller than in November, and the integuments around it are healthy nearly to the edge.

She has now regained complete sensation of the pelvic integuments and of the lower limbs, but has never yet been able to exert the least voluntary movement of any part of either of these limbs. She can move both limbs passively, by exerting the muscles of the trunk and arms when seated on an armchair.

The lower limbs are usually in a state either of rigid flexion or rigid extension; if they even be relaxed, it is not possible to observe the fact satisfactorily, as when the limbs are handled, or otherwise tried, the muscles are *then* felt to be tense; and when she is carried to or from bed her lower limbs always are seen to be stiff, and never "dangle" over her mother's arm. They are occasionally agitated by tremors, and can still be made to display involuntary movements of flexion and extension, of an irregular and forcible kind.

Friction over the sacrum regularly produces flexion of the thighs and knees with extension of the feet. If, while the knees continue flexed by the above proceeding, tickling the soles, or pinching and rubbing the calves, be resorted to, there are produced extension of the knee and flexion of the foot, the hipjoint remaining unaffected. But if, on commencing this experiment the knees

* "As is, indeed, admitted to be possible, by the author of the article in Part V. of the 'Brit. and For. Quarterly Review of Med. and Surg.,' p. 38."

be straight, or extended, the same treatment of the soles and calves produces flexion of both knees and feet.

Pricking with a pin the sole and dorsum of the foot gives acute pain, and regularly produces sudden flexion of the foot; so that when the dorsum is acted on, the foot is forcibly jerked against the pin, occasioning repeated exclamations of pain.

WILLIAM ELLIOT, M.D.
CHRISTOPHER HUDSON, M.D.

Carlisle, Saturday, March 24, 1838.

To Dr. Marshall Hall.

Dear Sir,—In accordance with your request I herewith transmit a report of Hannah Blair's case down to the present day. Dr. Hudson and I have no doubt of the accuracy of the poor girl's statements. There has been a gradual recovery of sensation. I think I acquainted you in the first despatch with the partial restoration of feeling in one leg. The involuntary movements consequent on external irritation are certainly now preceded by sensation, but are (as distinctly as on the occasions formerly reported) entirely independent of volition.

I observe that in Mr. Grainger's recent work (quoted in Johnson's "Med. Chir. Review," for January, 1838, p. 134), mention is made of a case in some respects similar. Mr. G. remarks that "the capability of *exciting* muscular contraction is not equally possessed by all parts of the external surface, but that the *sole of the foot* is the precise part *in which* the action is *excited* in the most energetic manner." It seems to me that a certain part is spoken of here as both capable of *exciting* and *of displaying*, or having *excited in* it, these involuntary movements. In my case slight irritation or tickling of the sole of the foot excited much more readily than irritation of other parts, spasmodic movements of the extensors of the toes, flexors of the foot, and even flexors of the knee, but no action was excited *in the sole itself*. Believe me to be, dear Sir, yours most faithfully and respectfully,

WILLIAM ELLIOT.

CALCAREOUS CONCRETION DISCHARGED BY EXPECTORATION.

PATHOLOGISTS are well acquainted with the circumstance of the occasional formation of calcareous concretions in almost every part of the body; the kidney and the bladder are common and familiar illustrations of this fact. In gouty persons the quantity in which those morbid secretions are produced is well known to the profession.

But although these bodies do exist in a great variety of organs, it is seldom that we have an opportunity of ascertaining the fact until it is disclosed by post-mortem examinations.

The accompanying drawing is taken from a specimen of calcareous concretion in my possession, which was coughed up by a young man, aged twenty-five, who had never had any previous reason to imagine himself the subject of thoracic disease. He has never been a patient of mine, but is distantly related to a family which I am in the habit of attending. The circumstance was mentioned to me in common conversation, and it was in consequence of my expressing a wish to see the specimen as well as the patient, that I had an opportunity of obtaining the following account from himself.

He stated that he had never been the subject of inflammation of the chest; that his health had been generally good, never having been laid up more than twice in his lifetime, once when he had the small-pox, and, subsequently, about five years since, with typhus fever. In answer to my interrogations, he said he had never had any pain in the chest, but generally expectorates a little on first waking in the morning; never suffers from thirst; his pulse is 72, and regular. The bowels are rarely constipated; he always has one, and generally two alvine evacuations daily. The pupil is of the middle size; the nails are rather long and tapering. This substance was coughed up one morning before he had breakfasted. It resembles half the shell of an almond, with a central cavity; it was whole when expelled, but the patient broke it with a hammer "to see what it contained," and he says "it was filled with thick greenish matter, which smelt unpleasant." The other portion was lost in consequence of having been crushed by the blow, which disclosed the nature of its contents. I was not able to discover anything with the stethoscope that could have led me to imagine that any such substance existed in the lungs, but percussion produced rather a duller sound on the left side than on the opposite.

There is a very singular physiological fact connected with this person, viz., only one-half of the trunk and head is liable to perspiration, which is the right; this peculiarity extends also to the upper extremities, but the lower limbs are equally affected by diaphoresis. It was really curious to observe large drops of perspiration on the right side of the forehead, whilst all that part to the left of the mesial line was perfectly dry, although, apparently, of the same temperature.

H. B. BUFFORD.

20, Grove-place, Lisson grove.

EFFECTS OF BELLADONNA IN THE ALLAYMENT OF INFLAMMATION AND PAIN.

To the Editor of THE LANCET.

SIR:—I am not aware that the external application of belladonna, in the form of extract, is well known and properly appreciated, in the signal removal which it effects of certain acute and dangerous diseases of an inflammatory nature. Having noticed the Rev. Sydney Smith's letter (in your Journal of the 6th of January), regarding the successful use of the aconite in tic douloureux, I thought I would not allow the properties of the belladonna, in cases of an equally distressing and much more dangerous character, to remain longer hid in the oblivion which a considerable experience has taught me that it did not deserve. Not only from this, but if the few following remarks, *en passant*, shall advantage suffering humanity, and hold out a safe, easy, and certain cure to my professional brethren, it shall be another source of great gratification to me.

I have tried the extract of belladonna in cases of an erysipelatous nature, and found it to have the most beneficial effect, nay, the most signal influence over the disease; the distressed patient not only being relieved from his excruciating pain, but from his affliction altogether, the belladonna having some powerful property of backing and removing the inflammation.

I have tried it in numerous cases of orchitis, and inflammation of the spermatic chord, and have found it in my hands a never-failing remedy, as the following case, amidst a multitude of others of a similar kind, and which occurred under my own immediate observation, during the course of last week, will testify.

CASE.—H. M'Anilly, ætat 23 years (according to statements taken at his bedside), sustained a severe injury by a weight falling upon and otherwise bruising his left testicle, which instantly gave rise to severe acute inflammation, and such a measure of agony as to cause him ten restless days and nights, during which period of time he had been treated scientifically, in as far as leeching, and purging with salts, and cold applications were concerned, but without any relief from his distressing symptoms; he had not had a moment's respite from pain. The condition of the patient may be easily imagined when I saw him for the first time:—Collapsed features, brow covered with a clammy perspiration, faltering pulse, eyes shut, and a low moaning sound issued from patient; testicle still intensely painful, and greatly swollen; spermatic chord in the same state. I administered, upon the spot, a mixture containing an anodyne ingredient, and with a small brush I painted the painful and swollen parts with the extract of belladonna; six hours after this the patient was lying awake, having had a short sleep, and comparatively free from pain. I applied the belladonna three different times; at each visit, after these applications, the pain was evidently decreasing and the swelling subsiding; till, at the end of the third day, both had entirely disappeared; he was then free of any complaint, with the exception only of great prostration of strength. His bowels were now attended to and regulated in the first place; cordials and nourishing diet were next enjoined, and at present, five days from the time at which I first saw him, he sits up a little, the dying man being now perfectly convalescent.

This is not a single and solitary case. I have found the application of the belladonna, in the manner above mentioned, produce effects in every case, in whatever stage tried, equally striking and decided. The conviction produced in my mind of its eminently useful character, is not an opinion formed from analogy, or to have my name "associated with this drug," but by the repeated, uniform, and invariably good results which have followed its use in numerous cases of erythema, erysipelas, and particularly of orchitis; and my only wish at present is, to stimulate further inquiry into its properties, and to furnish a hint to some of the readers of your widely-circulated Journal, to verify, by actual trial, the above statements. I am, Sir, your constant reader,

JOHN HALL, M.D.

Airdrie, Scotland, Jan. 25th, 1838.

RHEUMATISM, WITH PERIODICAL FITS OF DELIRIUM, TREATED BY ANIMAL MAGNETISM.

To the Editor of THE LANCET.

SIR:—As the following curious case shows that animal magnetism may sometimes prove useful as a curative agent, I shall feel obliged by your giving it a place in your widely-circulated Journal. Your's respectfully,

THOMAS CHANDLER.

58, Paradise-street, Rotherhithe,
March 29th, 1838.

Mr. D., æt. 18, had a severe attack of rheumatism in January, 1837, which was at first confined to the knees, but on the third day, the 8th, it suddenly attacked the scalp; pulse 120, and other symptoms of fever; he was bled to ℥xij., and took calomel and opium.

9th. Better in the morning, but in the

afternoon all the symptoms returned with increased violence, and late in the evening he became suddenly delirious, and remained so all night, although he was again bled, which quieted him a little.

10th. Remains much in the same state as last night; his head was shaved, and spirit lotion applied; very soon after the application of the lotion he became sensible, after having been delirious sixteen hours.

He had no return of the delirium until the evening of 11th, when at seven another attack occurred which lasted two hours, though without violence; the lotion was again used, and also sinapisms to the feet, with decidedly beneficial effect. He continued to have a fit every evening, varying not more than an hour in its time of commencement, and lasting from one to two hours; his nights were sleepless, but during the day he appeared tolerably well.

Quinine was now used, grs. ij., every four hours, and grs. vj. an hour before the attack; this had the effect of shortening the fit and making it later every night, until at last, after intermitting one evening, it left altogether. The attack lasted twelve days, but one fit, produced by excitement, occurred five nights after.

He remained perfectly well until Dec. 6th, when he was again attacked with rheumatism, which was followed in two days by periodical fits of delirium much more violent than in January. Quinine was again used in much larger doses, but apparently without effect. Dr. Blundell was consulted, and prescribed musk, and afterwards arsenic with it, under which treatment he again recovered about the 23rd.

January 22nd, 1838. I was again sent for, and found him suffering from rheumatism; in the evening he had an attack of delirium (of the same character as formerly, but still more violent) which recurred every evening with such violence that three strong men with difficulty restrained him, snapping at all who approached him, and biting the sheets and pillows. Cold applications to the head aggravated instead of relieving him; musk, arsenic, quinine, carbonate of iron, and creosote, all in large doses, failed giving the slightest relief; five drops of Scheele's hydrocyanic acid, on the second night, increased to eight, appeared to moderate, in some degree, the violence of the fit. On the 17th day of the attack, viz., 8th February, the fits had gradually increased in duration to three hours; this evening Dr. Elliotson saw him during the attack, and tried Mesmerism, but apparently without effect. He, however, persuaded me to try it again on the following evening.

Friday, February 9th, commenced Mesmerism at eight, P.M., and continued two hours and a quarter; the fit came on about nine, and lasted one hour and a quarter; the stages of the fit were very evident, though he remained so quiet that he did not require the slightest restraint; it went off suddenly in a burst of laughter, after several attempts. To-day he took his medicine as usual, viz., *carbonate of iron*, ℥iv.; *sulphate of quinine*, ℈j., in the course of the day, and grs. viij. of *hydrocyanic acid*, and grs. xij. of *creosote* an hour before the fit.

February 10th. Commenced Mesmerism at a quarter past eight, and continued it an hour and a half; the attack then ceased as last night; medicines as yesterday; he now allows that there is some influence in this marvellous remedy, which he at first treated with contempt.

11th. Commenced at ten minutes past eight, and continued an hour and a quarter; the fit lasted fifty minutes; it appeared more violent as he raised his head from the pillow, and stared much more than on the previous evenings, but between these movements the sleep was more profound. He now sleeps about three hours at night, which he has not done since the commencement of the illness.

12th. The acid and creosote were now omitted. Began manipulating at eight, P.M.; continued one hour; the fit lasted forty-five minutes.

13th. Thinking the fit might be brought on at any hour, commenced at half-past seven; it came on in five minutes, and lasted twenty-five.

14th. Has passed a very quiet night, and appears much better this morning. Mesmerised him at eight, P.M.; fit came on in eight minutes, and lasted twenty-five; symptoms much as usual; but in the intervals the sleep is much more profound.

15th. Omitted all medicine but a tonic. Commenced at a quarter before nine; fit came on in four minutes, and lasted twenty-four; sleep very profound in the intervals, and when the fit went off he did not awake as usual until I made some transverse passes with the hand before his eyes, which instantly aroused him. After the fit he is troubled with violent headach for half an hour, followed by intense itching of the scalp, lasting for about two hours.

16th. Commenced at ten minutes to nine; fit came on in three, and lasted twenty-two minutes.

17th. Mesmerised him at seven; fit came on in three, and lasted twelve minutes; I terminated it thus early thinking it might be shortened at pleasure as it was so brought on; he awoke the instant the transverse passes were made, and appeared much better than usual, dressed himself again, and remained up two hours, eat a hearty supper, and slept well.

18th. As his nose had bled rather profusely for two nights, ordered a few leeches to be applied to his temples in the evening, to which he strongly objected, and was much irritated by my suggesting them, as

his father insisted on their being applied. Grown bold by experience, resolved to magnetise him earlier in the day; commenced, accordingly, at a quarter past four; though dreadfully excited at the time, he was sound asleep, and the fit came on in five minutes. Fearing to terminate it as quickly as yesterday, allowed it to last seventeen minutes, when I awoke him as usual, and he appeared more tranquil.

19th. Magnetised him at a quarter before one; he was sound asleep in two minutes, though perfectly cheerful before; a slight fit came on which I terminated in seven minutes; he remained well all the rest of the day.

20th. Omitted the manipulations; he had no attack, nor has he had one since; from this time he may be considered well.

Two experienced medical men, besides the members of the family, witnessed the effects of the remedy, if so it may be called.

N.B. Any medical man who may feel interested by this account, and wish to learn further particulars of the case, can apply to the author, and may, through him, procure an interview with the father of the patient, who will feel much pleasure in corroborating these facts.

CHOLERA IN IRELAND.

To the Editor of THE LANCET.

SIR:—I beg to forward, for insertion in your Journal, a letter which I have just received from a medical friend in the South of Ireland. I have reason to believe, that cholera prevailed, to a very considerable extent, in the City of Waterford during the months of November and December last. This fact strongly confirms the idea, if it does not actually demonstrate, that the attack of cholera, which made its appearance at Limehouse early in November last, formed part and parcel of the same epidemic which, having slightly touched the capital of the British Empire, has extended to Ireland, unfortunately with an increased degree of severity. I remain, Sir, your obedient servant,

P. HENNIS GREEN, M.B.

My Dear Sir:—In reply to your inquiries concerning the existence of cholera in Ireland, I beg to inform you, that the cholera made its appearance here in the second week of December last, and continued for about two months. I think I do not exceed the mark in saying, that in that space of time we had one hundred cases of *genuine Asiatic cholera*. It prevailed about the same time at Dungarvan, where, as I have been told, a Board of Health has been formed, and it had previously been at Waterford. We have not had a single case here for the last month, but a few cases are now at Killeagh. In the last visitation here it presented exactly the same appearances as on its first visit. The treatment which my experience has led me to place most confidence in, is the acetate of lead (before any other remedy) to check or stop the premonitory diarrhœa; and, if assistance is not timely sought, so that collapse is at hand, flannel bags filled with salt made as hot as can be borne, applied to the trunk and extremities, and the coldest drinks (ice-water) taken internally at the same time. When the pulse has sufficiently rallied, small bleedings, with calomel, seem to arrest that stage of congestion which is so frequently followed by fatal consecutive fever, better than any other remedies. I never saw any final good from saline injections, and found no other remedies of use but those above-stated, with the exception of turpentine applied on flannel, and covered with a bag of hot salt, to relieve cramp, and the prussic acid to allay vomiting, which it does in a remarkable manner. I have kept the hot salt applied continually for three days and nights, where the collapse has been so complete that no pulse could be felt at the wrist, and yet recovery has taken place. Two of my relatives died in December of cholera, Miss A. Ellis G. and Mrs. K., one in fourteen, and the other in ten hours. I am yours faithfully,

R. GREEN, M.D.

Youghal, March 17, 1838.

NAVAL SURGEONS.

To the Editor of THE LANCET.

SIR:—As a period is approaching when it may fairly be hoped that the long-neglected claims of Naval Medical Officers will meet with that attention which is due to them, and with an earnest desire that my brother officers may have the benefit of your advocacy, by your being appointed to the "Commission of Inquiry" about to be instituted, I beg leave to offer a few remarks on the subject of their grievances.

The situation in which naval medical officers are placed, in comparison with their brethren in the army, as regards pay and emoluments, is ably shown in the letter of "A Naval Surgeon of the last Century," inserted in No. 18 of THE LANCET this year (Jan. 27). But I fear he does not give you a clear idea of the "glaring difference and irksome condition of naval assistant-surgeons on board a man-of-war," in reference to those of the army, and therefore I conceive it necessary to be more explicit.

It is a fact, that army-assistant surgeons, when ordered a passage, or embarked on board a man-of-war, not only mess with the lieutenants and other ward-room officers, as a matter of established right, but also have cabins, or screened births, allotted them,

while the naval-assistants, probably their seniors, mess with the midshipmen and sleep in a hammock.

In many instances promotion to assistant-surgeons is delayed until after twelve or fourteen years servitude; and should promotion at length be obtained, the time served, however long it may be, reckons only as three years, leaving a residue of twenty-seven years to be served to complete the period for retirement; the intervals, when on shore, on half-pay, not included. Allowing the assistant-surgeon, on his entry into the service, to be 22 years of age; period of service, previous to promotion, at 12 years; intervals on half-pay, 10 years; period of servitude required to complete 30 years, 27 years;—he will have arrived at the age of 71 years before he can retire from the service on 15 shillings per day; one day previous to which his half-pay is only six shillings per day, if promoted.

There are two assistant-surgeons now employed; one, R. Gordon (1801) Temerain; the other, Thomas Bell (1805) Tower Hill; each must be sixty years of age or upwards; their full pay is 6s. 6d. per day; half-pay, three shillings.

The Secretary of the Admiralty may get up in his place in the House of Commons, and assert that the pay of assistant-surgeons has been increased, when there is no one present sufficiently acquainted with the real state of the case to contradict him. It is true that 1s. 6d. has been added to the daily pay of assistant-surgeons *having the entire medical charge* in small vessels; but these comprise a small proportion of the entire body, and it is therefore a boon to a few individuals only.

There are now 337 assistant-surgeons on the list, 59 of whom entered the service previous to 1815, and 278 since; of the former, seven are employed, and 240 of the latter. I would propose, therefore, that all of the first 59, who are qualified for promotion, should be allowed to retire on 4s. per day, the remainder on 3s. per day.

As medical men enter both services with similar qualifications, they should be equally remunerated. The term of assistant-surgeons should be allowed to be reckoned (including their first three years service) from the time of passing their examination for surgeon, and their pay and half-pay increase, as in the army.

In order to ascertain the claims for remuneration of each of the individuals to be placed on the retired list, a return should be required from the Admiralty of their actual service on shore or afloat; one year at sea or on foreign service to be considered equal to two on shore. The first 100 surgeons being, on an average, 60 years of age, should be permitted to retire; the amount of pay to be regulated by length of service. Each of the remainder, on the effective list, should be required to take his turn of servitude, except the first 200, with any of whom it should be optional to serve, or accept a commutation, on the same scale as in the army: the widows' pension to remain. The pay of the surgeons on the effective list to be the same as in the army.

It may not be inappropriate here to give the pay of the medical officers of the American navy, which I now subjoin:—

SURGEONS.	Pay per Annum. Dollars.
First five years after date of Commission	1000
D°..... at navy yards.....	1250
D°..... in sea service.....	1333⅓
D°..... of the fleet	1500
Second five years	1200
D°..... at navy yards, &c....	1500
D°..... sea service	1600
D°..... of the fleet	1800
Third five years	1400
D°..... at navy yards	1750
D°..... sea service	1866⅔
D°..... of the fleet	2100
Fourth five years	1600
D°..... at navy yards.....	2000
D°..... sea service	2133⅓
D°..... of the fleet	2400
Twenty-five years and upwards	1800
D°..... navy yards.....	2250
D°..... sea service	2400
D°..... of the fleet	2700
ASSISTANT SURGEONS.	
Waiting orders	650
At sea	950
After passing	850
At sea after passing	1200
Navy yards	950
After passing	1150*

A dollar, being at least worth four shillings sterling, makes the pay of an assistant-surgeon at sea, after passing, £240 sterling, or about 13s. per day. I am, Sir, your obedient servant,

A SURGEON OF THE PRESENT CENTURY.

March 29, 1838.

DR. ELLIOTSON ON MEDICAL INSTRUCTION.

To the Editor of THE LANCET.

SIR:—A letter, which I felt it right to address to the Medical Faculty of the London University, on some points of medical education, was lately published in your Journal, at my request, together with the answer, as I was desirous of making my opinions publicly known, because the style of the acknowledgment, made by the Senate to a polite and most respectful communication, led me to believe that my remonstrance would be spurned by them.

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* So in American Navy List.

The object of my letter was to show that the duty of the Professor of the Practice of Medicine being to teach the symptoms, nature, effects, causes, and treatment of diseases, morbid anatomy was necessarily part of his subject, since many diseases are essentially structural, and almost every disease may induce changes in the appearance and structure of parts, which changes in innumerable instances become or produce characteristic symptoms and importantly influence our treatment. To prevent him from teaching this part of his subject would be as irrational as to prevent him from describing the symptoms of diseases. If he does his duty in this point, and the Professors of Surgery and Midwifery do theirs, how much morbid anatomy will be left for a separate course, I know not. I contend only that, if attendance on Professors fully teaching these three subjects is made compulsory, it would be absurd and unjust to compel the student of those classes to attend also a separate course upon morbid anatomy. I myself exhibit every medical morbid specimen and drawing in our museum, and all the plates in the works of Dr. Carswell, Cruveilhier, and other authors; and I treat every subject of Dr. Carswell's fasciculi as fully as it is treated in them, with this advantage, that the morbid anatomy, symptoms, history, and treatment are all presented in combination.

To argue that separate books have been published on morbid anatomy, is the same as to argue that there should be a Professor for the diseases of every organ or for every disease, since books are written on the diseases of particular organs, and on individual diseases; and allow me to add that the most successful and minute cultivators of morbid anatomy have been practitioners, who have written histories of diseases, and have unavoidably treated of their morbid anatomy. Need I refer to the trea tise of John Hunter on inflammation, of Laennec on diseases of the chest, of Rayer on diseases of the skin, of Abercrombie on the diseases of the brain, and on the diseases of the abdomen?

I deeply regret that the writer of a reply in your Journal to my letter bearing my signature should have stooped to write anonymously, as though he was ashamed of his proceeding, and that he has thought proper to mention Dr. Carswell's lectures. I wrote upon an abstract principle, and in reference not to my own but another institution. For Dr. Carswell I have the highest respect; I have no doubt that his lectures are good, and I do not object to their establishment. I contend only that, if it is enacted that students shall attend lectures on the practice of medicine, surgery, and midwifery, it should be enacted that the Professors should treat the subjects properly and therefore fully teach the morbid anatomy of all diseases; and that to compel attendance upon a separate course of morbid anatomy also, would be superfluous and unjust. But I would never object to the delivery of a course on morbid anatomy. So far from objecting to Dr. Carswell's lectures, I would not object to the appointment of other Professors also in University College to teach any parts of my course or the whole subject. In some German Universities several teachers of the same subject are allowed. I would never limit the supplies of knowledge, but I would not compel the student to take the same thing twice over from different sources.

Here, however, Sir, allow me to state distinctly that I would not compel attendance upon any lectures whatever. I smile when I hear of the endless meetings of the Medical Faculty of the New University to determine, in imitation of old bodies, what attendance they shall require of candidates. Let examiners determine in what subjects they will examine, and leave the candidate to acquire his knowledge in his own way. I am satisfied that regulations as to study merely put money unjustly into the pockets of teachers, hamper the student, and save the examiners trouble. If examinations are conducted properly, the student will offer himself with sound knowledge. A private tutor is indispensable at Cambridge to those who wish for distinction; but there is no regulation on the point, and yet each student puts himself to the expense of a private tutor. There should, in fact, be more examinations than one, and they should be long and searching; specimens, drawings, instruments, and dead bodies should be employed on the occasion. Ridiculous regulations as to what courses the student shall have attended, how many, and in what order, at what time of the year, and for how many years, and, forsooth, what vacations the teachers shall give, would be useless. But the examiners and examinations must not be what they are at present. I would not insist even on dissection, because, if a dead body were employed at the examination, it would soon be discovered whether the student had dissected. I would, however, insist upon hospital attendance and clinical instruction, because no books, or other means, can compensate for the want of these; and it would be difficult to test a person's familiarity with actual disease as we can his practical knowledge of anatomy. I say this boldly, because I receive not a farthing for my hospital duties, nor ever will; and therefore it was discreditable in the anonymous writer of the reply, who knows that the whole of the fees go to the support of the hospital, to urge that my pupils have "to pay for clinical instruction from Dr. Elliotson," and thus cunningly attempt to make it appear that I am paid for my hospital duties.

These declarations, I trust, are an answer to the anonymous writer's charge of selfishness against me. I may add, that he well knows I never joined in attempts to procure an exclusive charter for University College, but gave such strong opinions against it before a committee of the House of Commons, that they were quoted before the Privy Council by opposing counsel. He well knows that, when I joined the school, finding the annual fee for my lectures six pounds and the perpetual nine, I at once reduced the former to five, and the latter to seven, hoping that, as the school was not flourishing, my colleagues would follow my example. Such my fees remained for four years, when, finding that my colleagues retained their old prices, and had classes larger than ever, I resolved no longer to suffer for the general good, and raised my fees gradually in the course of three years to their original amount, and shall now transmit my office unimpaired, and with a larger class than ever, to my successor. I also assure the anonymous writer that I am ready at this moment to resign my chair to Dr. Carswell, or to any other person whom he and all my colleagues may consider a fit successor. Nothing but the affectionate respect which I have always experienced from the students, and the assurance that I am doing good, induces me to retain it. I know well that it has occasioned me a great annual pecuniary loss, by making the innumerable medical enemies of the institution enemies to me.

The anonymous writer, in contending for the propriety of a distinct course on morbid anatomy, forgot that the new Senate propose to unite general pathology with it, so that his arguments in their favour fall to the ground. How the general principles of pathology will be united with mere morbid anatomy more advantageously than with the course on the symptoms, nature, causes, and treatment of disease, I do not understand; nor how they can be so usefully taught by any other than the Professor of Practical Medicine. He urges that anatomy is taught in books which do not treat of physiology. Certainly all the mechanical points of an instrument may be taught without the use to which it is put. If in the Sorbonne there is a distinct class for teaching caloric and chemical affinity, this does not make it the less objectionable; and I can say only that this is not the case at Oxford, Cambridge, Edinburgh, the Royal Institution, King's College, or University College; and that in the chemistry of Dr. Turner, and other eminent British authors, they are treated of equally with all chemical substances. But I trust the writer will lose no time in urging our Council to split Professor Graham's course into at least two, and give one half to somebody else; and as he believes that "a still farther division of my course will be required before many years elapse," I advise him to urge openly, not anonymously, that there shall be one professor for the symptoms, another for predisposing, and another for the exciting, causes of each disease; one for prognosis, one for diagnosis, and one for treatment. As to hygiene, if "the hygiène (it is remarkable that he not only uses the French word and not the English, but incorrectly quotes me as using) of communities, of armies, navies, and other professions; the means of determining and preserving health in all ordinary circumstances," are not fully taught in the courses of medical jurisprudence, as they are termed, though the proper name should be state medicine, let the matter be looked to; and, as this is almost as much a popular as a professional subject, I do not wonder at Dr. Andral's course being attended by nearly two thousand auditors.

The personal feelings of the anonymous writer are manifest in his statement that there is as "much attention, animation, and activity in the lecture-rooms of Berlin and Paris as in my own class," and that "the proportion that fall asleep is not greater than will be found among the gentlemen hurried on by the torrent of my own eloquent discourses." If they are hurried on in a torrent I fear that not one can manage to sleep. But to be serious, if he will drop into my theatre, near which he is so frequently, he will have an opportunity of seeing that, though I lecture in the evening, none fall asleep, as I did when I first read his letter, and that the class is so remarkable for silence and activity of attention, that the admiration expressed by all strangers is fully justified. If I hurried them on in a torrent of eloquence, I should be unfit for my duties, which consist in delivering solid truths in a lucid and unostentatious manner, and in simple diction. I have the honour to remain yours, &c.

JOHN ELLIOTSON

April 2, 1838.

ARSENIC IN MANUFACTURES.

To the Editor of THE LANCET.

SIR:—Having formerly studied medicine, I am now a glass maker, and "feel an impulse" to enter the field of discussion on the subject of "arsenic in candles." In your last number there was an advertisement announcing "arseniated candles not poisonous," by a Member of the *Westminster Medical Society*. It is pleasing to find a medical man stepping forth from the ordinary trammels of professional fashion, when the absolute truth is, as it always should be, the sole object of investigation. But to the point.

Posological tables indicate the dose of the

"acidum arseniosum," at from gr. 1-10th to gr. 1-4th. The candle manufacturers commenced its adoption, "secundum artem," in appropriate doses of gr. 1-10th per candle, supposing that, where such candles were lighted, there would be, at least, two of the genus homo to partake of their virtues, and enjoy their medicine without a fee.

It has been recorded that the men of modern lights grew bold in practice, and charged their candles with doses of gr. iv. each! Report then very liberally multiplied the quantity of poison by 10, and called it grs. lv. per candle! but Mr. Brande very soon discovered that the only alternative left for a candle thus maltreated, would be to sing "the light of other days," for it could not exhibit any in its own. It was a "monstrum"—"cui lumen ademptum," *Brandrd*, "non in esse," and, therefore, representing an "imaginary quantity" only.

Well; this matter having been as gravely discussed as grave subjects require, it appeared to have been defunct, and decently interred, when a posthumous friend exclaims, "Arseniated candles not poisonous!" Be it so, though few would like to eat them.

I make glass, and never hesitate to dose our poor founders with as much arsenic per pot of glass-making materials, as amounts to 112 lbs. per week (= seven millions, eight hundred, and forty thousand candles, containing each gr. 1-10th, or, one hundred and ninety-six thousand, containing each gr. iv.), which is totally sublimed in one apartment, in which the head founder is present and active from twenty-two to twenty-four hours at a spell, four times per week, the subordinates under him alternating every twelve hours.

One of the founders has founded for us upwards of forty years, and is not yet *found dead*. He is still on duty, hale and strong, being now between sixty and seventy years of age; and the majority of the men employed in the hot departments of our works are remarkably healthy, and have obtained some celebrity for the length of their continuous services, and numerous progeny.

The great "hue and cry" raised against "the modern luminaries," reminds one forcibly of the ludricous efforts made by the "wry-mouthed family" to blow out a farthing rushlight,—a difficult undertaking for the parties concerned, and no great feat when accomplished. I am, Sir, yours very truly,

CHARLES T. COATHUPE.

Wroxall, near Bristol,
Feb. 20, 1838.

THE LANCET.

London, Saturday, April 14th, 1838.

MR. FRENCH, the honourable Member for Roscommon, proposes to reply to all the objections that have been urged against the *Irish Medical Charities Bill*. He had no House to listen to his speech on Wednesday, the 4th inst., and this untoward accident enables us to furnish him with further occupation during the Easter recess. It must be admitted that the hon. Member displays no lack of zeal, or confidence, in a bad cause. If the Bill were free from the leaven of corruption, and calculated to confer substantial advantages on the sick poor and the medical profession in Ireland, Mr. FRENCH's pertinacity would be intelligible; but with a measure that he must now feel is the converse of all this, his conduct is difficult to be understood: it reminds us of a mad knight-errant of the olden times, asserting, to the death, the chastity of a harlot.

The misrule of the *Medical Charities* in Ireland, and the propriety of affording medical relief to the poor, on a more efficient and extended system, have been fully established. To attain these objects, Mr. FRENCH's Bill has been brought forward; but if it be allowed to pass, unaltered, it will organise a system of corruption which would aggravate instead of removing the abuses which it recognises and professes to reform. Are we to be cheated with words? Is the medical profession in Ireland to be deluded by a parade of "Inspection," and a pompous establishment, into the belief that they will all be treated impartially; and that the monopolies which now cross their career will be swept away, and the sanctuaries of which they are the priesthood no longer polluted, when the Medical Charities Bill places them unreservedly at the mercy of an odious and irresponsible machinery? Better have no change than a change for the worse. The system of mono-

poly is breaking down,—its elements are separating; but it does not follow that we are to adopt and sanction the first wild suggestions that are offered for the reconstruction of a new system.

What is the object of the *Medical Charities Bill?* To constitute an efficient body of public officers for inspection over and administering medical relief in Ireland. This was the problem professed to be solved in the Bill; with what ill success every one is now aware. The Medical Charities Bill recklessly overlooks the unchangeable principles of human action, the first rules of legislation, the agents with which it has to deal, and the only means by which its objects can be accomplished. It places the medical institutions of Ireland in the hands of SEVEN Commissioners, and sets those seven Commissioners in the midst of circumstances where they have only the alternative of sacrificing their own or the public interests. It evinces an entire ignorance of the qualifications of medical practitioners; or, while hypocritically professing to abolish the monopoly of the Dublin College of Surgeons, extends that monopoly—which at present only affects the infirmaries—to the dispensaries, and every other charitable medical institution in Ireland.

The duties of the Commissioners and Inspectors will require for their discharge—*time, impartiality, responsibility, freedom from all suspicion, talents for business.* The Commissioners of the present Bill would not be remunerated for their labours; they would consequently be engaged in medical practice, and would devote only their few hours of leisure and fatigue,—the intervals of profitable professional employment,—to the management of the Medical Charities. They could not be impartial, for nearly all the aspirants to Commissionerships are engaged either as teachers, or as the medical officers of hospitals, where, from their youth upwards, they have never witnessed or practised any other line of conduct than that of making place and patronage subordinate to private interest. Rob Roy's law,

> the good old rule
> Sufficeth them, the simple plan,
> That they should take who have the power,
> And they should keep who can.

We have given several instances of this, and although the cases of the Meath and Mercer's Hospitals render further illustrations almost unnecessary, we shall add that Jervis-street Hospital, when governed by medical officers, whom the Bill would make Commissioners, was almost deserted by the subscribers. The irresponsible Medical Board made Mr. JAMES M'ENVOY senior surgeon, although he resided out of Dublin, and had not performed the duties of his station for years.—(Poor Inquiry, Ireland, Appendix C. P. II., p. 89—93.)

The seven unpaid Commissioners would be *irresponsible*, because you cannot call an unpaid officer to account. He never forgets that he *gives* his services, which, such as they are, he imagines you are bound to accept gratefully. He can indulge in jobs with impunity, and screen himself behind his colleagues; each can throw the blame on his brother, and the public can never say distinctly, when a crime has been committed, "Thou art the man." Besides, the rules, the returns, and all the other parts of a plan of inspection, could only be drawn up by one individual mind, and no man would devote all his energies to an arduous task when he knew that the credit of its successful accomplishment would be shared or claimed by six others. If the seven Commissioners could, for a moment, be impartial, their conduct would not be free from suspicion, when judging between their own apprentices, their own pupils, and the graduates of their own Colleges, and other graduates who had never paid them a shilling. The Commissioners would, moreover, have to regulate and inspect their own hospitals, or the infirmaries of their old pupils, where the most flagrant abuses might exist; and how would they dare to hold another up to obloquy, who could fairly address them as the thief did ALEXANDER in Cyrius:—*Tu pessimus omnium latro es*;—thou art the greatest thief of all. The *seven* Commissioners proposed to be appointed under the

Medical Charities Bill could not devote adequate time to the duties it enjoins; they will neither be impartial, responsible, nor free from suspicion.

The unpaid Commissioners who squandered thousands of pounds in building Irish Lunatic Asylums furnish one among many examples of the ruinous effects to which such Commissions never fail to give birth. Do the Government, where they are intimately interested in the result, ever employ unpaid Commissioners? Is the Irish police force placed at the disposal of seven unpaid Commissioners? Is the Army, the Navy, the Medical Board of the Army, or the Medical Board of the Navy, under the direction of unpaid Commissioners? No. This lot is reserved for the sick defenceless poor, whose scanty revenues the Government can see squandered and remain unscathed.

The qualification clauses profess to throw open offices in the infirmaries to the members and graduates of all Colleges, yet effectually exclude them from every medical institution in the country. Instead of instituting a public examination, and employing judicious tests of qualifications, the Bill resorts to an exploded system, and measures men's talents by the number of fees that they have paid hospital surgeons.

No one acquainted with the objects of the Medical Charities Bill can support its principal provisions; their extreme folly will assuredly confound the candour and good sense of Lord MORPETH. The Government could only support its extravagant enactments if, animated by the spirit of MACHIAVELLI, they desired to make the medical profession odious, and to absorb the management of the medical charities in the vortex of their adopted, cherished, paid *Poor-Law Commission*.

Let it not be imagined that this Bill is recommended by any real economy. To say nothing of the indecent jobbing it will encourage, the salaries of the five Inspectors, at £600 each, will amount to £3000, besides the salaries of clerks, and the office and travelling expenses. Now, one well qualified Commissioner, and three or four Inspectors, would form an adequate establishment; and £3000 would afford adequate remuneration. The two Inspectors of Prisons will no longer inspect lunatic asylums, and, if necessary, something may be taken from their salaries, which by 7 Geo. 4, c. 74, sec. 58, were not to exceed £900 a year, exclusive of £20 a year for each county report. Length of service would entitle them to their present salaries if their annual reports had been complete; but the statistical tables and returns enjoined by the Act have never been published. The mortality and sickness in the Irish prisons have never been stated; and although the average number of prisoners is given, and the expenditure, the quantity of each article furnished is suppressed. So that the report and inspection scarcely merit the relative increase of salary which the Bill would bestow.

Under the present regulations not one Catholic has been appointed to office in the County Infirmaries, and Mr. FRENCH's Bill will perpetuate the management in the hands which have upheld this despicable exclusiveness, and made qualification turn on sectarian distinctions. Every one that professes a religious creed, holds the doctrines in which he has been educated; and because a man is born a Catholic he is to be excluded in Ireland from office, as if Catholic physicians and surgeons had not enriched medicine with as many important truths as Protestants. Let Irish Members bear this in mind.

We have been informed that *none* of the surgeons to the County Infirmaries have been examined,—as the 5th and 6th George 3rd directs,—"before the surgeon-general, "the visiting surgeon, the two assistant-"surgeons, and the resident surgeon of Dr. "Steven's Hospital, and the five senior sur-"geons of Mercer's Hospital." This Act has never been repealed; and we were not aware that all the present tenures of office, which the Medical Charities Bill seeks to confirm (§ 19) were illegal. Nevertheless this construction is fully borne out by the

Commissioners, in the Irish Poor-Law Inquiry. Speaking of Meath Hospital, the Commissioner says, after citing the above section of the 5th and 6th George 3rd (Irish Parliament),—"This rule has never been "observed; *none of the present medical officers "are therefore legally appointed*, having never "been qualified to be elected, and they by "whom they were appointed not having "been qualified to elect."—(Poor-Law Inquiry, Ireland, Appendix C., P. II., p. 97.) It is strange that neither Mr. Cusack Roney, nor any of the Commissioners, refer to the tenure of office in the other County Infirmaries.

We have not space to notice all the objectionable matter in this Bill, and must postpone the examination of clause 19, in which the mode of supplying relief by building infirmaries, is referred to.

In the mean time practitioners in Ireland cannot be too active in pressing their interests upon the attention of Members of Parliament. Seven unpaid Commissioners are about to exalted over their heads, and Mr. French liberally proposes to shut out five-sixths of them from every hospital, dispensary, and lunatic asylum in the kingdom. The course we shall pursue is simple and straightforward. We have no crooked interests to serve, and shall constantly oppose any Medical Charities Bill that is not rationally calculated to secure efficient relief to the sick; to open offices in public institutions to the talent of every College, and to guarantee in all the institutions, liberal management, vigilant inspection, and the regular record of observations, that may establish the foundations of medical science.

WESTMINSTER MEDICAL SOCIETY.

Saturday, March 24, 1838.

Mr. Hale Thomson, President.

ALARMING HÆMORRHAGE RESULTING FROM SALIVATION.—AUSCULTATION AS A MEANS OF DIAGNOSIS IN PREGNANCY.

Mr. Streeter related a case in which hæmorrhage to an alarming extent was consequent on salivation. The patient, a woman 47 years of age, had been constipated for about a week, various purgatives which she had taken from a practising druggist having failed to relieve the bowels. The druggist, therefore, recommended her to take a dose of calomel, which he said would have the desired effect, and gave her three pills, which she took. The next day (Saturday) she was in a state of perfect ptyalism, which continued with great severity until the following Wednesday. On Thursday bleeding from the mouth took place to an alarming extent, and continued during the day. Mr. Streeter was first called to see her on Thursday night, when he considered her life was in danger from the hæmorrhage. He found her low and weak, with the pulse characteristic of hæmorrhage. The mouth was filled with a large clot of blood, and was greatly tumefied; the smell was extremely offensive, and the profuseness of the hæmorrhage led him to suspect that it arose from the dental branch of the maxillary artery. He did not remove the clot of blood from the mouth at this time, but it increased to such an extent in the course of the night as to interfere considerably with the respiration, and he found it necessary to remove some portions of it with a pair of scissars, disturbing the chief bulk of it as little as possible. By keeping the mouth perfectly quiet, and allowing the clot to remain in its place, supporting the patient's strength with beef-tea, and giving the following mixture, she went on well from this time, without a bad symptom:—One drachm of *wine of opium*, one drachm of *tincture of myrrh*, and six ounces of *water*; two tablespoonsful every four hours. From the result of the case, which was very satisfactory, it would appear that no disease of the bone had taken place. Where did the hæmorrhage arise? He never before saw a case of salivation in which hæmorrhage was so profuse as to place the patient's life in danger. In the case he had related he knew nothing of the previous history of the patient, beyond what he had stated; he was called first about a month since. There was nothing in her appearance indicative of a hæmorrhagic diathesis. The case occurred at a time when the menstruation had become of that character which it assumes at a period when it is about to cease in the system; but from the absence of various symptoms which usually accompany vicarious hæmorrhage, he did not attribute the bleeding in this case to that cause.

Mr. Chinnock related a case in which a patient, who was subject to epilepsy, had his gums slightly affected by mercury. During one of the epileptic fits he bit the internal membrane. The injured part ulcerated, and the ulceration spread to the angle of the lower jaw. Hæmorrhage to an alarming extent came on, and though styptics had the effect of stopping it for a time, it recur-

red, and the patient perished. Mr. Chinnock also recollected a case in which a tooth had been removed from a lady who was under the influence of mercury. Hæmorrhage from the socket of the tooth took place to a very great extent; the actual cautery was applied thirty-six times before the bleeding was arrested.

The PRESIDENT had seen a case in which hæmorrhage took place from a person with spongy gums, who was under the influence of mercury; in this instance free scarifications, and a cold solution of alum, effected a cure.

OBSTETRIC AUSCULTATION.

Dr. WILLIAMS was now called on for a promised paper on the above subject. The author commenced by speaking of the neglect of obstetric auscultation in this country, a subject deeply to be regretted, considering the extreme importance, in some cases, of ascertaining the presence of pregnancy, both as regarded the safety and character of the patient, and the reputation of the medical attendant. Having adverted to the great uncertainty in many cases of the general signs of pregnancy, such as the morning sickness; the stoppage of the catamenia, enlargement of the breasts, and the areolas, Dr. W. remarked that auscultation offered better, and more decided means of arriving at the truth. The sounds to be detected by the application of the stethoscope in a case of pregnancy were two-fold, and depended on the circulation of the blood; the first was the uterine murmur dependant on the circulation of the mother; the second was the pulsation of the fœtal heart. The first of these sounds was the earliest to be detected, and was to be heard in one of the iliac regions a little above the pubis. The pulsation was at first simple, no murmur being present. In the course of two or three weeks the murmur became gradually distinct, and was generally more prolonged as the pregnancy was more advanced. The murmur differed in different individuals. In some it was of a blowing character, in others a file-sound, and in some a cooing murmur. The sound was synchronous with the pulsations of the arteries in the neighbourhood. Writers differed as to the seat of this sound; by some it was considered to arise from the pulsations of the blood passing into the placenta, but as it was heard for a short time after delivery, and after the placenta had become impervious from the death of the child, this explanation was not satisfactory. He believed that the sound depended on the circulation in the uterine vessels generally. An opinion had lately been broached that the sound depended on the pressure of the uterus on one of the iliac arteries. This appeared at first plausible, but the facts which had been stated by Dr. Evory Kennedy were against it; for when the uterine vessels were obstructed by the death of the child, the murmur soon ceased, though the pressure of the uterus on the artery was not removed. The sound, also, was very rare in ovarian disease. Regarding the time at which this sound is to be first distinguished, Dr. Kennedy had detected it at the tenth week of gestation; earlier writers mention a much later period; he (Dr. W.) had heard it at the end of the eleventh week. Now, did this sound occur from other causes besides pregnancy? We knew that the pressure of an artery produced a bellows murmur; but this pressure was very uncommon in the parts in question; there was a bellows murmur over the arteries in cases of anemia, but this was observed to be the case all over the body, and the sound was not confined, as in cases of pregnancy, to one particular spot. The presence of this murmur in one of the iliac regions, was not alone, to be taken as demonstrative of pregnancy, but it was a surer sign of that state than any of the general symptoms, and, when combined with these, amounted to a certainty. The second sign, the pulsation of the fœtal heart, was heard later, and when distinctly detected, was a conclusive sign of pregnancy. In the advanced stages of *gestation*, when this sound was not heard by the experienced auscultator, pregnancy was not present, or the fœtus was dead. The sound of the heart was to be heard in a circumscribed spot midway between the umbilicus and the pubis, a little on one side of the mesial line. In the earlier stages it required great attention and perfect quiet, in order to detect the sound. In later stages, however, it was very clear and distinct, and was heard over a larger space. At first the sound was single, averaging about 160 to 180 beats in a minute. At about the sixth month the pulsations became double, and averaged from 130 to 160. The sound of the fœtal heart was generally first heard about the period of quickening; in some cases before it. He (Dr. W.) had heard it a fortnight or ten days before the occurrence of this symptom. It could not be well mistaken for any other sound. Regarding the mode in which the examination was to be conducted, the use of the stethoscope was better in both cases than the direct application of the ear.

Dr. REID considered that Dr. Montgomery in his late work, had laid too much stress on the areola as a sign of pregnancy. He (Dr. R.) had seen the areola with enlargement of the glands in a woman who was not pregnant, and he had seen a woman in the fourth month of her pregnancy, in whom neither of these signs were present. He agreed in the opinions of Dr. Williams, but the uterine murmur was with great difficulty detected before the fourth month, and the sound of the fœtal heart was not distinct until much later. He thought we should

be cautious in giving a decided opinion. A case had occurred in Dublin, in which the practitioner, not a good auscultator, it was true, had detected the sound of the fœtal heart, as he supposed, and declared the woman pregnant. Dr. Lebatt was sent for, and it was found she was not pregnant.

Dr. A. T. Thomson said, that because many persons were bad auscultators, it was no argument against the value of the stethoscope. In the later periods it was not so difficult to decide on the presence of pregnancy; it was in the early stages that the use of the stethoscope as a means of diagnosis was the most valuable. The importance of this early knowledge could not be overrated, particularly in some medico-legal cases. He was more inclined to place confidence in the areola and enlarged glands than was Dr. Reid.

Mr. North said the principal value of the stethoscope was in the earlier months of pregnancy. Dr. William Hunter used to say that at the fourth month he knew nothing about it,—at the fifth, he began to suspect, and at the sixth to form his opinion.

Dr. Chowne spoke of the uncertainty of the general signs of pregnancy. Regarding the use of the stethoscope, he had never heard the placental murmurs very early. He differed from Dr. Williams in thinking the murmur belonged to the vessels of the uterus generally, as he (Dr. C.) considered that it was only heard in that part of the uterus to which the placenta was attached. He had been confirmed in this opinion lately, in a case of twins. After the first child was born he was enabled to pass his finger up to the placenta, and ascertain its attachments. Over this part he heard the placental murmur very distinctly; it was not by any means clear in other parts of the abdomen. After the placentæ were removed he could detect no placental murmur whatever. The absence of the sound of the fœtal heart was not decisive evidence of the death of the child. In the case alluded to, he failed to detect the sound of the heart of the second child; it was a footling case; the child was born alive. The absence of the sound might arise from extreme debility of the fœtal circulation, or from the peculiar position of the child in utero.

Dr. Williams answered and said, that the observations that had been made on the uterine murmur by Dr. Kennedy, had sufficiently proved that it was not always loudest over the situation of the placenta.

Saturday, March 31, 1838.

Dr. Williams, President.

CASE OF SOFTENING OF THE BRAIN.—PERFORATION OF THE STOMACH.—INDIGESTION.

Mr. Hastings detailed the following case. A little girl, six or seven years of age, who had always enjoyed good health, with the exception of a slight attack of erysipelas about eighteen months since, was seized by a man under the angle of each lower jaw, and carried a distance of about twenty yards. In the evening of the same day (Monday), she complained of great pain, and headach, which were followed by vomiting. At noon on Tuesday, severe diarrhœa came on; a dose of jalap was administered with no good effect. On the Wednesday morning Mr. Hastings was sent for, but before he could arrive at the house the child was dead. A coroner's inquest was held on the body, and Mr. Hastings was requested to examine it; he did so, fifty hours after death. The superficial veins of the brain were much engorged; there was great difficulty in separating the brain from the base of the skull. The entire base of the brain was in a state of *ramollissment*, and the cerebellum was entirely disorganised; the only portion of the brain not affected with the softening was the anterior and superior portion. There was no infiltration of sanguineous fluid in the organ; the arteries were not minutely examined. The bowels were healthy, the liver and spleen were enlarged and softened.

Mr. Streeter recollected a case of softening of the brain, in which the middle artery of the cerebrum was obstructed by a large clot of fibrine.

No further observations being made on Mr. Hasting's case,

Mr. North was called on for some promised

OBSERVATIONS ON SPONTANEOUS PERFORATION OF THE STOMACH.

The speaker divided these perforations into acute and chronic; those which occurred suddenly in apparently healthy persons, who became attacked with symptoms of colic or cholera, and died in the course of a few hours; and those which take place after many years of suffering from a variety of symptoms, too frequently denominated *indigestion*, such as vomiting, pain at the stomach after taking food, &c.; in these instances, the persons died suddenly, and the only appearance observed was a small aperture in the stomach. Two cases were related, one illustrative of each form of the disease. The author observed, that in cases of perforation of the stomach there is not generally inflammation of the peritoneum, nor do the contents of the stomach always escape into the cavity of the abdomen. Regarding the diagnosis, in acute cases it is impossible to be able to give an accurate one; the symptoms which result from perforation of the stomach might occur from a dozen other causes. In more chronic cases he thought, that where persons had been labouring for years under pain at the pit of the stomach after eating, whether there was

vomiting or not, a more doubtful prognosis should be generally given than is usually the case in what is called simple indigestion. Regarding the mode of distinguishing cases of perforation of the stomach from natural causes, from those cases which result from corrosive poisons, the author conceived that no appearance observed in the organ should lead to the assumption of poisoning, unless supported by collateral evidence, and the actual detection of the poison by chemical tests. Regarding the treatment of cases of perforation of the stomach, he thought, as the symptoms were doubtful when there was a suspicion of its presence, it was better to keep the patient quiet in mind and body, and employ local depletion, blistering, and tartar emetic ointment, and not resort to that stimulating plan of treatment, which is too generally employed in those cases which are erroneously classed under the name of indigestion.

After some observations by Dr. J. Johnson, Dr. Wilkes, Dr. Chowne, and Mr. Brumsgill, the Society adjourned.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 27th, 1838.

Dr. Bright, President.

RESULTS OF POISONING BY SULPHURIC ACID.

By John Wilson, *M.D., Physician to the Middlesex Hospital.*

The object of the author in this paper, was to describe the condition of the œsophagus in a patient who died 45 weeks after having swallowed a considerable quantity of sulphuric acid. The history of this case had been previously detailed in a paper read at the College of Physicians in July, 1834, the patient being then alive, at which time a cylindrical tube, eight or nine inches in length, which had been ejected by a violent fit of coughing, was laid on the table. At that time the patient had survived the injury six months, and was soon afterwards discharged from the hospital, in a great measure recovered. She was admitted, however, in the following September, much reduced, and, after very great suffering, died on the 17th of November. On examination *post mortem*, the lower two-thirds of the œsophagus were thickened and narrowed, and very vascular, and softened internally; the upper third of the tube shone like an old cicatrix. In the stomach opposite to the spleen was an opening of the size of a half-crown, with softened edges; and the abdomen contained a quantity of dark-coloured fluid, but no signs of inflammation. Preparations of the ejected tubular membrane of the œsophagus were exhibited to the Society. A coloured model was also exhibited to the meeting of the stomach of another patient, who had died 22 hours after swallowing two or three ounces of sulphuric acid, which had remained in the stomach a quarter of an hour. The lining of the mouth, pharynx, and œsophagus in the latter case was of a silvery-grey speckled appearance, like a snake's skin, and the lining membrane of the stomach was coated with a black pitch-like substance, which did not easily wash off, but which, when scraped off, left the membrane entire.

A paper was also read on the

USE OF ARSENIC IN SOME DISORDERS OF THE UTERUS.

By Henry Hunt, *Esq. of Dartmouth, communicated by Mr.* Perry.

The author was first led to observe the effects of arsenic on the uterus in a case of carcinoma of that organ, in which it relieved the sufferings of the patient in a remarkable degree, and in exact proportion to the increase of its poisonous effects upon the system. This fact, added to the circumstance of the genital organs being sometimes observed to be inflamed where arsenic has been taken as a poison, induced the author to hope that it might be found to be serviceable in some disorders of these parts, an opinion in which he was encouraged by the experience of Dr. Locock, in a case in which that mineral had been exhibited by him for the cure of a disorder of the nose, he not being aware at that time that the patient was also affected with menorrhagia. The author relates six cases of menorrhagia, in which the patients had taken arsenic with very marked benefit. In these instances there was no organic disease of the uterus; but the excessive flow of the menses appeared to be the consequence of exhaustion, originating, however, in several individuals from different causes. The success attending the use of this medicine in menorrhagia induced the author to try it in some other disorders of the uterus, and some favourable cases of its agency are annexed. Some of the most favourable of these are a case of irritable uterus, and one of neuralgia, occurring regularly about the menstrual period, both of which were entirely relieved. The paper concludes with some observations on the effects of arsenic on the genital organs when given in poisonous doses, from which the author infers, that its agency depends upon its action on the mucous membrane as a stimulant.

Dr. Locock said that the case alluded to in the paper as having been treated by him, was the first in which he had noticed the effect of arsenic in arresting menorrhagia. Since the period at which this case occurred, he had seen a great number of instances

in which the same remedy was equally successful. Arsenic was most efficient in cases of atonic menorrhagia, but he had employed it with much benefit in cases of the acute form of the affection, after depletion had been resorted to. Respecting the use of arsenic in cases of cancer of the uterus, he had had a case some years since in which the pain was so excruciating as almost to set the influence of narcotics at defiance. As much as 24 grains of the acetate of morphia, in 24 hours, gave little relief. In a consultation with Sir B. Brodie, the use of arsenic was suggested, Sir A. Cooper having found it remarkably efficacious in a case of cancer of the womb. Small doses of the liquor arsenicalis, given repeatedly in the day, but never collectively, amounting to more than ten drops in the 24 hours, afforded the patient more relief than the dose of acetate of morphia just mentioned.

Dr. Merriman could have wished that the cases of menorrhagia, related by Mr. Hunt, had been given more in detail. In only two instances had the author made an examination per vaginam, in consequence of which we were left in ignorance of the state of the uterus in the other cases. Menorrhagia might be the result of causes in no way implicating disease of the uterus itself; and he (Dr. M.) thought the author had not clearly made out, in all his cases, the proposition he wished to establish, that arsenic had a specific and local effect on the uterus. Regarding cancer of the uterus, we found, occasionally, that a remedy which was remarkably beneficial in one or two cases of the disease, failed when resorted to in other instances. About the time Mr. Carmichael published some observations on the effects of the preparations of steel in cancerous affections, he (Dr. M.) had under his care a severe case of cancer of the uterus. He gave the carbonate of iron internally, with the effect of considerably increasing the sufferings of the patient. An injection of a solution of sulphate of iron had, however, a remarkably soothing and beneficial effect. He had not found such benefit from the remedy in other cases of the disease, though occasionally it had afforded some relief.

Dr. Leonard Stewart believed that the curative effect of the arsenic in Mr. Hunt's cases depended on its specific and local action on the uterus. Many cases were on record which proved that arsenic acted on the genital organs specifically.

Dr. Locock considered that in many cases the arsenic acted merely as a tonic, but he believed more as a local than a general one. He was quite aware that many cases of menorrhagia depended on causes which did not in any way implicate the uterus. He had seen many cases of menorrhagia from local debility, as after frequent miscarriages, or frequent parturitions. In this kind of cases the use of the arsenic was generally most successful. The cases of menorrhagia related by Mr. Hunt were of the atonic kind. In the other cases related by that gentleman the arsenic was employed to relieve the pain which followed inflammation of the uterus. It was not generally necessary in cases of menorrhagia in young women to examine the uterus. He (Dr. L.) did not understand the nature of Dr. Merriman's objections to Mr. Hunt's cases. Mr. Hunt was a sound practitioner, and would not employ a remedy like arsenic without a full inquiry into the history of the case. He (Dr. L.) had employed arsenic in small doses, in a case of dysmenorrhœa occurring in a hysterical patient. Both the hysteria and painful menstruation were materially relieved. In that case he believed the arsenic acted on the uterus itself.

Dr. Merriman did not deny that the arsenic in Mr. Hunt's cases had produced great benefit; but he thought no evidence had been adduced to show that the uterus itself in these cases was affected, to support Mr. Hunt's proposition, that arsenic acted locally and specifically on the womb in the process of cure.

Dr. Burne said, that disordered function of the uterus was often the result of disorder of the functions in general; let these functions be restored, and the uterus generally would be set right. All the viscera of the pelvis were affected by sympathy with one another; thus we had dysuria in stricture of the rectum, &c. There were cases, however, in which the function of the uterus was not properly performed, when the other functions of the body were set right; and he thought these were cases in which medicines having a special and direct action on the uterus were most successful. He had employed ergot of rye in very many cases of menorrhagia with success, and also in those cases of constant discharge of blood from the uterus after abortion. The ergot of rye, either in decoction, infusion, or powder, he had found of great benefit. In cases of painful menstruation, he had found quarter of a grain doses of extract of belladonna of great service, and of more effect in relieving the pain than opium.

ACCOUNT OF A CASE IN WHICH THE ENTIRE LOWER JAW WAS REMOVED ON ACCOUNT OF DISEASE.

By John G. Perry, *Esq., Surgeon of the Foundling Hospital.*

The case here related occurred in the St. Marylebone Infirmary, during the last year, in a young woman of a scrofulous habit, aged 20 years. According to the history given by the patient of the progress of the disease, as well as from the anomalous position of some of the teeth, it appeared pro-

bable that it had been of very long duration, and that the commencement of diseased action was, at least, coeval with the period of the permanent dentition. From the appearance of the bone (which was exhibited to the Society) there could be, as the author conceived, no doubt that the disease by which it had been destroyed was necrosis, or that it had up to a certain period undergone the natural process of cure, since the entire bone was enclosed, even to the condyles, alveoli, and coronoid processes, with a case of new osseous matter. This reparative process had, however, been interrupted by the separation of the periosteum from the new deposit in consequence of extensive disease of that membrane and suppuration within it. Thus the new bone also perished, and the process of reparation became arrested. The author removed the bone without difficulty, by dividing it into three portions, and the wound healed kindly. Care was taken to leave as many as possible of the teeth suspended in the gum, in the hope that a sufficient degree of solidity would be acquired in the process of healing to render them serviceable. The patient is now, nine months after the operation, quite well, with the exception of an inconsiderable sinus, which discharges in a trifling degree, and has the power of masticating solid food with surprising facility, when it is considered that the process is chiefly performed between the tongue and the upper teeth. There is no reproduction of bone, but the patient can bite with considerable firmness, and the form of the countenance is less altered than might be expected after the removal of so large a portion of its solid basis.

DUBLIN APOTHECARIES' HALL.

To the Editor of THE LANCET.

SIR:—As Secretary to the Court of Examiners of the Apothecaries' Hall here, I beg to correct a misstatement which appeared in the last Number of THE LANCET. In alluding to the discrepancies which prevail among the different examining boards, it was advanced, that whilst the London Court of Apothecaries' Hall extended the examination to every department of medical science, the Dublin Court restricted it to mere pharmacy, and that the licentiate of the latter corresponded with "the Continental pharmacien, or with the chemist who has been examined and licensed."

So far, Sir, from this statement being correct, the Dublin Court also requires from its candidates certificates of attendance on each branch of medical knowledge, and always conducts its examination in reference to subjects of general practice, the licentiate apothecary being here, as in England, the only general practitioner.

Your giving insertion to the above will oblige, your obedient servant,

C. H. LEET, M.D., Sec.
Apothecaries' Hall of Ireland, Dublin.
March 20th, 1838.

DESERTION OF THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR:—I doubt not that when the attention of the ruling authorities is directed to the following, the grievance will be instantly redressed:—

Last month, business calling me to London, and having a great desire to see the museum of the Royal College of Surgeons, I intended to pay it a visit, and accordingly went to the College, but on entering the hall I found it vacant; I wandered about the building for some time, being unable to find the museum, or any person to direct me towards it; and after waiting for some time I was, to my great chagrin, obliged to return without having fulfilled my object. Now, if it had only happened on this one occasion that there was no one present in the Hall, to show to members that attention which they have a right to expect, I should not trouble you with this letter, but, on consulting my medical friends, I find that it is a very usual circumstance. I certainly should think that gentlemen who contribute so materially as the members do to the funds of the College, ought to meet with more respect in their visits to that establishment. I am, Sir, your obedient servant,

A MEMBER OF THE COLLEGE.

The Works of John Hunter, F.R.S., with Notes. Edited by JAMES F. PALMER, in 4 vols. 8vo., with a vol. of Plates in 4to.

THIS valuable work is now completed, and in a manner which does credit to the editor, who has not only kept his promises to the public, but considerably exceeded them, as well in the extent of new matter added to the text, as in the length and value of the notes and illustrations. Having in a former number made some observations on the first volume, and on the general objects of the editor, we shall not repeat, on this occasion, what we then said. We have no hesitation in affirming, that most of the great modern improvements of surgery are mainly traceable to Hunter, whose works, like those of a kindred genius—Bacon—abound in luminous hints, which only require development to constitute them real improve-

ments of the art. The time has been, and now past, when their study was confined to the leading members of the profession, who have borrowed without mercy, and often without acknowledgment, the most valuable parts of their writings from this source. Such, however, is the improvement of education, that this reproach will no longer exist, and therefore it is, we strongly recommend every student to provide himself with a copy of Hunter for the ensuing summer vacation, being fully assured that a careful and diligent study of its contents will prove one of the most invigorating exercises of the mind which he can pursue, and one which will yield him an abundant return of sound practical knowledge. The "Surgical Works," in three volumes, contain all that is required for those not interested in comparative anatomy, and may be had at a very reasonable rate.

RUPTURE OF THE INFERIOR VENA CAVA.

THE following case of rupture of the inferior vena cava we extract from a late number of the "Berlin Gazette."

A man, 50 years of age, had suffered under repeated attacks of hæmoptysis during his youth; for the last eighteen years he also had been affected with hæmorrhoids, and a varicose state of the veins of the foot, which gradually reached those of the thigh and inguinal region. About three or four weeks before his death, the patient laboured under a low fever, with intermitting type, from which he had nearly recovered, when, on the fourth day before his decease, he was suddenly seized with a sense of anxiety and oppression about the breast, accompanied by vomiting, and purging; these symptoms gradually declined, and the patient seemed to be in a fair way for recovery, when he was again suddenly attacked by violent pain in the right lumbar region, with oppression and urgent necessity for free air, &c. Convulsions soon set in, and the man died in four hours.

Some traces of chronic inflammation were found in the lungs; the right auricle of the heart was considerably enlarged, while, at the same time, its parietes were much thinner than is seen in the natural state; the right ventricle was also thinner than it should have been. The pericardium contained about two spoonfuls of clear serum. The liver was very dark coloured, soft, and full of blood; the vena portarum was enlarged, and spleen was at least twice its natural size. The whole of the abdominal venous system was also remarkably enlarged; the right lumbar and inguinal regions contained a large quantity of coagulated blood, and on a careful examination being made, the point of hæmorrhage was traced to the inferior cava, near its junction with the iliac vein.

This part of the vessel was remarkably enlarged, and perforated with several openings about the size of pins' heads. The parietes of the vessel did not appear to be thinned, although the enlargement comprehended its entire calibre.—*Berlin Med. Zeit.* No. 5, 1838.

TUMOURS IN THE AXILLÆ PRODUCING MILK.

WE have detailed, at page 786 of the last volume of THE LANCET, an interesting case of the secretion of milk by a tumour in the axilla. A no less remarkable example may be found in the "Berlin Gazette," No. 6, 1838, of which the following is a brief account:—

A woman, 21 years of age, when at the eighth month of her second pregnancy, remarked, for the first time, the presence of a tumour in each axilla. The tumours quickly enlarged, and soon reached the size of a hen's egg. They were insensible, and, when handled, gave the sensation of a hardened, knotty mass; when pressed between the fingers, they gave issue to a whitish fluid. The woman was delivered on the 16th of November; the milk-fever set in on the third day after the delivery, and the axillary tumours now became more enlarged, and discharged, for the space of eight days, a very considerable quantity of white fluid, resembling milk. After this period the secretion gradually declined, the size of the tumours became diminished, and when the relator of the case (Dr. Siebold) lost sight of the patient, the tumour had nearly totally disappeared. In addition to this case, Dr. Siebold relates two other instances of the secretion of milk from supernumerary nipples placed three or four inches below the normal ones.

TO CORRESPONDENTS.

The communication of *Dr. Phelan* shall appear next week.

H. R. W. How often must we have to inform our correspondents that we never give medical advice in the way to which he alludes.

The insertion of Mr. Newport's reply to Dr. Grant has been unavoidably postponed, as also have been various other communications.

X. Y. Z. If the University alluded to be a foreign one, the fraud committed would not be punishable in this country.